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Education

1856

Sub. – Education

Place :- Calcutta

Year – 1856

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No. 1906.

FORT WILLIAM, HOME DEPARTMENT,

EDUCATION.

THE 12TH DECEMBER 1856.

READ again, the Despatch from the Hon'ble the Court of Directors, in the Public Department, No. 49, dated the 19th July 1854, on the subject of Education in India.

26th January 1855, Nos. 147 to 159. Read again, the papers on the subject, recorded on the Consultation of the date noted in the margin.

Read again, the letter addressed to the Hon'ble the Court of Directors, under date the 26th January 1855, reporting the measures adopted for giving effect to the Hon'ble Court's instructions on the subject of general Education.

Read again, the Hon'ble Court's reply, No. 65 of 1855, dated the 27th June.

7th Sept. 1855, No. 40. 12th Oct. 1855, No. 46. Read again, the papers recorded on the Consultations of the dates noted in the margin.

Read again, the letter, No. 88 of 1855, addressed to the Hon'ble the Court of Directors, under date the 12th October.

Read the Report of the University Committee, dated 7th August 1856, with its eleven enclosures.

Read the following Minutes :—

By the Governor General, dated the 15th November 1856.
" Hon'ble J. A. Dorin, dated the 24th November 1856.
" Major General the Hon'ble J. Low, dated the 25th November 1856.
" Hon'ble J. P. Grant, dated the 29th November 1856.
" Hon'ble B. Peacock, dated the 1st December 1856.

Read also, the Draft of a Bill submitted by the Secretary, for the incorporation of the Universities of Calcutta, Madras, and Bombay.

b

RESOLUTION.

1. In conformity with the directions of the Hon'ble Court of Directors, as contained in paras. 24 to 35 of their Despatch in the Public Department, No. 49, dated the 19th July 1854, a Committee was appointed, on the 26th January 1855, to prepare a Scheme for the establishment of Universities in the Presidency Towns of Calcutta, Madras, and Bombay.

2 When the Committee was appointed, some doubt was felt as to whether the Hon'ble Court desired the Government of India to proceed at once, on receiving the Report of the Committee, to the establishment of Universities, or whether they desired that a further reference should be made to them on the subject. This doubt has been removed by the Hon'ble Court, in their Despatch of the 27th June 1855 (para 6,) in which they say :—" We are of " opinion, that all the measures necessary for the constitution of the Universities " should, in the first instance, proceed directly from your Government, and we " accordingly authorize you to proceed in the matter in such a way as may " seem best to you, without further reference to us. We would only remark, " that we approve your intention, that the Universities, at the different " Presidencies, should be formed on the same general *basis*, leaving it to the " Senates of the several Universities to form the detailed rules, with such " variations as local circumstances may render advisable."

3. The Committee having now submitted their Report, dated the 7th August last, the Governor General in Council proceeds at once to take into consideration the establishment of the Universities at the three Presidency Towns, in accordance with the views of the Hon'ble Court

4 In the orders of the Government of India, appointing the Committee, it was observed, " that the details of a Scheme, in accordance with the outline " sketched in the Despatch, should be settled with as little delay as possible, so " that Bills, for the incorporation of the Universities at Calcutta, Madras, and " Bombay, may, at the proper time, be brought into the Legislative Council, and " that Draft Rules for Examinations, for the grant of Degrees, and for other " cognate matters, may be ready for discussion and adoption by the Senates so " soon as those Bills are passed into Law" The Committee, therefore, though at the commencement of their proceedings they appointed a Sub-Committee to prepare the Drafts of Bills for the incorporation of the Universities, and though such Drafts were actually prepared, considered eventually " that this was a " matter beyond their province, and that the appointment of the Senates, and " the framing of Rules for their guidance, whether under the sanction of Law or " otherwise, must rest, in the first instance at least, with the Governor General " in Council." They have not, in short, dealt with the constitution of the Universities, or of the governing bodies, but have addressed themselves

exclusively to the system of Examination for Entrance Degrees and Honors in the several branches of Arts, Medicine, Law, and Civil Engineering.

5 The thanks of the Government are largely due to the Members of the Committee, for the careful and complete manner in which they have discharged their trust, amongst pressing vocations and claims upon their time, which, with many, can have left little room for additional labors. The work has been admirably performed, and the Governor General in Council has no hesitation in adopting, unreservedly, the Scheme of the Committee, which, with few exceptions, is strictly in accordance with the views expressed by the Hon'ble Court, in their Despatch of 19th July 1854, and by the Government of India in the letter appointing the Committee.

6. As regards the Examination upon Entrance, the Governor General in Council entirely agrees with the Committee in the opinion that it ought to be required His Lordship in Council believes that the mode in which it is proposed to hold it is the most convenient that could be adopted, and that the standard is fixed judiciously.

7. His Lordship in Council thinks that the Committee have given good reasons for not departing from the titles of Bachelor of Arts and Master of Arts, which are familiar, and have a recognized value in England and throughout Europe; and that they have done well in making the higher Degree in itself the mark of Honors awarded.

8. In respect of the Examination for the first Degree, although it is with some distrust that the Governor General in Council expresses an opinion different from that formed by the Committee after careful consideration, His Lordship in Council is of opinion that conditions somewhat more precise might, with advantage, have been laid down as an indication of the minimum of acquirements which should entitle a Candidate to that Degree.

9. According to the views of the Committee, this minimum is to be determined by the Examiners acting under the instructions of the Senate, and no doubt, whatever Rules the Committee might have framed, the application of them in practice, and a consistent adherence to them, would depend mainly upon the Examiners. Nevertheless, His Lordship in Council would have been glad if, without attempting to define accurately the minimum to be exacted in each branch of study (which, indeed, would be impracticable), it had been declared indispensably necessary that a thorough and perfect knowledge of some branches up to a certain point, or a complete mastery of certain recognized text-books, should be exhibited, not as in itself sufficient to secure even a bare Degree, but as a *sine quâ non* without which no Degree should be granted

10. Mathematics up to a certain stage, or the elements of Logic as treated in the works of one or other standard writer, might be prescribed as subjects upon which the knowledge of the Candidates would be as strictly and thoroughly tested, as in the case of their own Vernacular Language, a critical knowledge of which is wisely insisted upon.

11. The Governor General in Council considers, that some such rule would be beneficial, as enjoining exactness and completeness of knowledge, and as indicating that, though the amount required is described as "moderate," that which is known should be known thoroughly. The habit of discursive reading, and the acquisition thereby of superficial knowledge, are always dangerously seductive to Students, and are too often encouraged by Teachers; and the wide range of study to which even those who aim at the lowest Degree are invited may increase the danger. That the range should be wide is, in itself, quite right; but the fact, that it is so, seems to call for some counteracting inducement to close and accurate study.

12. With these observations, the Governor General in Council will leave the further consideration of this important point to the Senates.

13. The Governor General in Council cordially agrees in the decision to which the Committee have come in admitting the Evidences of Revealed Religion as contained in Butler's Analogy and Paley's Evidences, as one of the subjects which a Candidate for Honors in the Mental and Moral Sciences may select for Examination. The subject being entirely optional, and consideration being had for the studies pursued in affiliated Institutions, in some of which Theology will hold a prominent place, His Lordship in Council cannot think that this will be deemed by the Hon'ble Court to be an infringement of the spirit of their injunction that the Examination for Degrees should not include subjects connected with religious belief.

14. The rules by which Degrees in Medicine and in Civil Engineering are to be governed call for no observation.

15 It is recommended, that there shall be but one Degree in Law, and that a Degree in Arts shall be a necessary condition of obtaining it, provided that the standard of an ordinary Degree in Arts is not fixed so high as to make it too severe a test of the general Education of a Law Student. The Governor General in Council is of opinion, that the standard of an ordinary Degree in Arts ought not to be, and is not in the Committee's Scheme, fixed so high as to give any reasonable ground for such an objection.

16. Whether a Degree in Law shall be made a condition of admission to the Bar, or to the Judicial Service of the Company, will be determined by

the Government hereafter. The question must be decided solely upon a consideration of what may most conduce to a sound administration of the Law, and it would be quite premature to discuss it before the University has come into active operation, and has been proved. The course of Study in the University has properly been fixed without reference to the decision which may be taken upon this point.

17. The Committee have recommended that the proceedings of the Senates of the several Universities should be subject to the control of a central authority, such as the Governor General in Council, so that general uniformity may be observed, and that, in the words of the Government "at each Presidency Town, the same degree of acquirement, in every branch of knowledge, "should entitle its possessor to the same kind of Academical Distinction and "Honor." This will be very necessary. That the several Universities may differ from each other in respect of the particular branch of learning which each may most successfully cultivate, and that with time each will assume a distinctive character and merits of its own, is very probable ; but it is essential that the Degrees and Honors which each will have to confer should, respectively, mark the same amount of acquirement and merit.

18. For this purpose, and in order to preserve a general harmony of constitution, but with no desire to enforce rigorous uniformity in matters in which local considerations and the judgment of the Local Governments may beneficially have free scope, it will be necessary that the proceedings of each Senate should be reported to the Government of India, and that all Bye-laws and Regulations passed by them should receive the sanction of the Governor General in Council.

19. The Draft of a Bill for the incorporation of the University of Calcutta, with suitable adaptations for the other Presidencies, has been approved generally by the Governor General in Council, and will be placed in the hands of the Hon'ble Sir James Colvile, whom it is proposed to name Vice-Chancellor of the University, with a request that His Honor will take charge of it in the Legislative Council.

20. The Governor General in Council is hereby pleased to declare, in anticipation of the Act of the Legislature, that the Governor General of India for the time being shall be Chancellor of the University of Calcutta, and that the Governors of Madras and Bombay for the time being shall be, respectively, the Chancellors of the Universities of Madras and Bombay, and that the Lieutenant-Governors of Bengal and the North-Western Provinces, the Chief Justice of Bengal, the Bishop of Calcutta, and the Members of the Supreme Council of India, all for the time being, shall be ex-officio Fellows of the University of Calcutta.

21. His Lordship in Council is also pleased to appoint Sir James William Colvile, Kt., Chief Justice of Her Majesty's Supreme Court of Judicature at Calcutta, and late President of the Council of Education, to be the first Vice-Chancellor of the University of Calcutta.

22. His Lordship in Council is also pleased to appoint the following persons to be Fellows of the University of Calcutta:—

Charles Allen, Esquire, *Member of the Legislative Council of India.*
Henry Ricketts, Esquire, *Provisional Member of the Supreme Council of India.*
Charles Binny Trevor, Esquire, *Judge of the Sudder Court in Bengal.*
Prince Gholam Muhummud.
William Ritchie, Esquire, *Advocate General in Bengal.*
Cecil Beadon, Esquire, *Secretary to the Government of India.*
Colonel Henry Goodwyn, *of the Bengal Engineers, Chief Engineer in Bengal.*
William Gordon Young, Esquire, *Director of Public Instruction in Bengal.*
Lieutenant-Colonel William Erskine Baker, *of the Bengal Engineers, Secretary to the Government of India.*
Lieutenant-Colonel Andrew Scott Waugh, *of the Bengal Engineers, Surveyor General of India.*
Kenneth Mackinnon, Esquire, *Doctor in Medicine.*
Hodgson Pratt, Esquire, *Inspector of Schools in Bengal.*
Henry Walker, Esquire, *Professor of Anatomy and Physiology in the Medical College of Bengal.*
Thomas Thomson, Esquire, *Doctor in Medicine, Superintendent of the Botanic al Garden at Calcutta.*
Frederick James Mouat, Esquire, *Doctor in Medicine and Fellow of the Royal College of Surgeons.*
Lieutenant William Nassau Lees, *of the Bengal Infantry.*
The Reverend William Kay, *Doctor of Divinity, Principal of Bishop's College.*
The Reverend Alexander Duff, *Doctor of Divinity.*
Thomas Oldham, Esquire, *Superintendent of the Geological Survey of India.*
Henry Woodrow, Esquire, *Inspector of Schools in Bengal.*
Leonidas Clint, Esquire, *Principal of the Presidency College.*
Prosunno Comar Tagore. *Clerk, Assistant of the Legislative Council of India.*
Ramapershad Roy, *Government Pleader in the Sudder Court of Bengal.*
The Reverend William Stephenson, *Rector of St. John's College.*
The Reverend James Ogilvie, *Master of Arts.*

The Reverend Joseph Mullens, *Bachelor of Arts.*
Moulavy Muhummud Wujeeh, *Principal of the Calcutta Mudrussah.*
Ishwar Chundra Bidyasagor, *Principal of the Sanskrit College of Calcutta.*
Ramgopaul Ghose, *Formerly Member of the Council of Education.*

23. The Vice-Chancellor and Fellows of the Madras and Bombay Universities will be appointed by the Governor in Council of Madras and Bombay, respectively. A list of the Vice-Chancellor and Fellows composing each Senate will be furnished to this Department by the Local Governments for communication to the Legislative Council, and insertion in the Acts of incorporation.

24. The Meetings of the Calcutta University Senate can, for the present, with the permission of the Lieutenant-Governor of Bengal, be held in the Council Room of the Medical College Hospital and the University Examinations in the Town Hall. The Senate is authorized to appoint a Registrar from among the Officers of the Education Department, on a salary not exceeding Rupees 300 a month, and to provide him with a Clerk on a salary of Rupees 50 a month, and two messengers on Rupees 6 a month each.

25. The Senate is also authorized to appoint, from time to time, as many Examiners as may be required for the examination of the Candidates for Entrance Degrees and Honors, in the several faculties of the University, and to award to each Examiner such remuneration as may be considered sufficient, not exceeding, for the present, Rupees 1,200 a year in any case.

26. The Senate will proceed forthwith to promulgate the Rules proposed by the Committee, and sanctioned by the Government of India, and to pass such other rules, and take such further measures, as may be necessary to give early and full effect to the Scheme.

Ordered, that the necessary letters be addressed to the Hon'ble Sir James William Colvile and the other Fellows of the University.

Ordered, that a copy of this Resolution be furnished to each of the Local Governments for information and guidance, and to the several Departments of the Government of India, for information and such further orders as may be necessary.

Ordered, that a copy of this Resolution be published in the Calcutta and Vernacular *Gazettes* for general information.

CECIL BEADON,
Secretary to the Govt. of India.

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APPENDIX.

No. 281.

FROM

C. BEADON, ESQUIRE,

Secretary to the Government of India,

To

THE HON'BLE SIR J. W. COLVILE, KT.
THE HON'BLE J. P. GRANT.
D ELIOTT, ESQUIRE.
C. ALLEN, ESQUIRE.
*P. W. LEGEYT, ESQUIRE.
H. RICKETTS, ESQUIRE.
*W. RITCHIE, ESQUIRE.
C. BEADON, ESQUIRE.
*C. B. TREVOR, ESQUIRE.
LIEUT.-COLONEL H. GOODWYN.
*LIEUT.-COLONEL W. E. BAKER.
W. G. YOUNG, ESQUIRE.
K. MACKINNON, ESQUIRE, M. D.
*H. WALKER, ESQUIRE.
*F. J. MOUAT, ESQUIRE, M. D.
LIEUTENANT W. N. LEES.
*THE REVD. W. KAY, D. D.
*THE REVD. A. DUFF, D. D.
*THE REVD. D. EWART.
*THE REVD. J. OGILVIE, M. A.
*THE REVD. J. MULLENS, B A.
THE REVD. W. STEPHENSON.
H. WOODROW, ESQUIRE.
J. C. MARSHMAN, ESQUIRE.
BABOO PROSUNNO COMAR TAGORE.
BABOO RAMAPERSAD ROY.
BABOO RAM GOPAL GHOSE.
PUNDIT ISSERCHUNDER SURMA.

Dated the 26th January 1855.

GENTLEMEN,

Home Department.

1. THE Most Noble the Governor General in Council is desirous that steps should be immediately taken to prepare the Scheme of an University to be established in Calcutta, in accordance with the desire of the Hon'ble Court of Directors, as expressed in their Despatch No. 49, dated the 19th July last, of which twenty printed copies are herewith forwarded for your information. The terms of the Hon'ble Court's Despatch preclude His Lordship in Council from establishing an University, either here or at either of the other Presidency Towns, without fur-

* Those marked with an asterisk were subsequently added to the Committee.

ther orders from the Home Government; but, in anticipation of those orders, which, after the decided opinions embodied in the Despatch, His Lordship in Council cannot doubt will be favorable, he considers it desirable, that the details of a Scheme, in accordance with the outline sketched in the Despatch, should be settled with as little delay as possible, so that Bills for the incorporation of the Universities at Calcutta, Madras and Bombay may, at the proper time, be brought into the Legislative Council, and that Draft Rules for Examination, for the grant of Degrees, and for other cognate matters, may be ready for discussion and adoption by the Senates, so soon as those Bills are passed into Law

2 With a view to secure uniformity in all important points of principle, the Governor General in Council has come to the conclusion, that the Scheme of the Madras and Bombay Universities should be framed, in the first instance, by the body to whom is entrusted the duty of preparing that of the Calcutta University. He thinks it of considerable importance, that the three Universities should resemble each other in their main features, and especially, that the Acts of incorporation should be, as nearly as possible, cast in the same terms. Local circumstances will, doubtless, to some extent, render modifications necessary, but it is essential that the legal status and authority of each University should be the same, and that at each Presidency Town the same degree of acquirement in every branch of knowledge should entitle its possessor to the same kind of academical distinction and honor.

3. The Governor General in Council has accordingly been pleased to appoint you to be a Committee for preparing a Scheme for the establishment of Universities in the Presidency Towns of Calcutta, Madras and Bombay. In conformity with the wishes of the Hon'ble Court, His Lordship in Council has availed himself on this occasion of the willing and valuable assistance of the Hon'ble President and the Members of the late Council of Education; he has added to their number several other Gentlemen whom it is the intention of the Government hereafter to associate with them in the Senate of the University of Calcutta; and he has also appointed to the Committee the Members of the Legislative Council from Madras and Bombay, whose experience of the circumstances and wants of those Presidencies will enable them to render very valuable assistance.

4. The Hon'ble Sir James Colvile will be the President of the Committee, and the Committee will choose its own Secretary. The Secretary will have authority to frank, as on the Public Service, all letters relating exclusively to the business of the Committee, to indent for stationery on the public stores, and to incur such trifling contingent charges as may be necessary. If, as will be most convenient, the Secretary be already in charge of a public office, he will not require the services of a Clerk. The Committee will probably find it advisable to appoint from among themselves a Sub-Committee of Correspondence, to conduct the preliminary inquiries, and to frame the rough draft of a Scheme for discussion by the whole Committee. His Lordship in Council would deprecate resort to written minutes by any Member of the Committee, and would recommend as a preferable arrangement, that the Scheme, when drawn by a small Sub-Committee of Correspondence, should be discussed at a full meeting of the Committee (of which a majority may form a quorum,) and settled according to the opinions of the majority of Members present.

5. The Committee will correspond with the several Local Governments, and obtain from them their views and opinions in regard to the measures to be adopted for the

purpose of carrying out the Hon'ble Court's plan of an University in the several Presidencies. From the Hon'ble the Lieutenant-Governors of Bengal and the North-Western Provinces, the Committee will receive valuable suggestions in regard to the proposed Calcutta University ; and the Hon'ble the Governors in Council of Madras and of Bombay will afford the Committee all requisite information respecting those to be established at the other Presidency Towns. Those Governments will also be requested from hence to furnish the Committee with lists of the persons who are eventually to form the Senate of those Universities, in order that their names may be included in the Acts of incorporation.

6. The Governor General in Council is of opinion, that the office of Chancellor of the University of Calcutta should be held by the Governor General for the time being, and that the Lieutenant-Governors of Bengal and the North-Western Provinces and the Members of the Council of India should be Members of the Senate. In like manner, the Governors of Madras and Bombay should, in His Lordship's opinion, be the Chancellors, and the Members of Council at those Presidencies Members of the Senate, of the Universities of Madras and Bombay

7. It has been suggested to the Governor General in Council, that there should be two Degrees in each of the subjects embraced in the design of an Indian University, *viz.* Literature, Mathematics, Science, Law, Civil Engineering, and Medicine, and that, on the taking of each Degree, the student should have, as in the London University, an opportunity of taking Honors. This suggestion, His Lordship desires to leave to the consideration of the Committee, and eventually of the Senate, observing that any one Degree of the very low standard, which seems to be contemplated by the Hon'ble Court, would be of little value. The Governor General in Council also leaves it to the Committee to consider what titles shall be assigned to the several Degrees, but he desires to express doubts of the expediency of adopting, in the Universities of India, the nomenclature which has, from long usage, become peculiar to the Universities of England.

8. In the 30th paragraph of the Hon'ble Court's Despatch, allusion is made to the foundation of Professorships in connexion with the University, for the purpose of giving Lectures in certain branches of knowledge. The establishment of a General Presidency College in Calcutta has rendered unnecessary the foundation of any such Professorships here, but if they should be required either at Madras or Bombay, there seems to be no sufficient reason for not departing to that extent from the plan of the London University, which the Hon'ble Court have wisely held up as the model to be generally followed in India. In that case, however, the departments of instruction and of examination should be kept distinct from each other.

9 With these observations, His Lordship in Council leaves the subject to the careful and anxious consideration of the Committee.

I have the honor to be,

GENTLEMEN,

Your most obedient servant,

CECIL BEADON,

Secretary to the Government of India

COUNCIL CHAMBER,
The 26th January 1855

FROM

THE PRESIDENT OF THE UNIVERSITY COMMITTEE,

To

C. BEADON, ESQUIRE,
Secretary to the Government of India,
Home Department.

Dated Calcutta, the 7th August 1856.

SIR,

ON behalf of the Committee appointed by the late Governor General in Council, to prepare the details of a Scheme for the establishment of Universities in the three Presidency Towns, I have the honor to submit a Report of the proceedings of the Committee, from their appointment up to the present time, and of the Scheme which, after careful and mature deliberation, they have resolved to recommend.

2. As reported in Mr. Gordon Young's letter, of the 19th September 1855, the Committee, on being constituted under the orders of Government, conveyed in your letter No. 281, dated the 26th January last, met and resolved itself into the following Sub-Committees :—

First.—A Sub-Committee for preparing Drafts of such Bill or Bills as may be necessary for the incorporation of the University.

Second.—A Sub-Committee for preparing Draft Rules for Examinations for the grant of Degrees, and for other cognate matters, in the Faculty of Arts.

Third.—A Sub-Committee for preparing similar Draft Rules, &c. in the Faculty of Medicine

Fourth.—A Sub-Committee for preparing similar Draft Rules, &c. in the Faculty of Law.

Fifth—A Sub-Committee for preparing similar Draft Rules, &c. in the Faculty of Civil Engineering.

3. The first Reports of the several Sub-Committees in Arts, Medicine, Law, and Civil Engineering, (herewith submitted and marked A, B, C and D,) were sent to the Governments of the several Presidencies, Bengal, Madras, Bombay, and the North-Western Provinces, for such observations as they might desire to offer on the plans thus presented, as it were, in the rough. The replies of the several Governments, together with remarks from the various local authorities whom they consulted, when received, were printed and referred for further report to the Sub-Committees These replies are contained in the pamphlet marked E The Sub-Committees, after re-considering the former Reports in connexion with the observations which had been made thereon by the authorities of the several Presidencies, submitted their second and final Reports, marked F, G, H, and I, which were duly considered by the Committee on the 9th of July

4. The result of the meeting of the Committee held on that date was, that the Report of the Sub-Committees on Arts and Civil Engineering were adopted in their integrity; that the Report of the Sub Committee on Law was adopted, with the exception of a single rule proposed by the Sub-Committee, on the supposition of a contingency which did not seem to have arisen; and that the Report of the Medical Sub-Committee was adopted, with certain modifications, with advertence to which it was referred to a special Sub-Committee for revision. The proceedings of the meeting of the Committee will be found in Enclosure K, and the Report of the special Sub-Committee on Medicine (which accords with the views of the Committee) in Enclosure L.

5. Before proceeding to give a sketch of the Scheme, as a whole, which the Committee recommend, it may be useful to recapitulate the views of the Hon'ble Court on the subject of Universities in India, as contained in paragraphs 24 to 32 of their Despatch of the 19th July 1854, in accordance with which it is intended that the plan of these Institutions should be framed.

6. The Hon'ble Court, then, desire generally, that the Universities should be established, so as to "encourage a regular and liberal course of Education, by conferring Academical Degrees as evidence of attainments in the different branches of Art and Science, and by adding marks of honor for those who may desire to compete for honorary distinction;" they express an opinion, that "the form, government and functions" of the London University "are the best adapted to the wants of India," and "may be followed with advantage, although some variation will be necessary in points of detail;" they indicate the constitution of the governing body of the Universities, observing that "the Senates will have the management of the funds of the Universities, and frame regulations for your approval," (that is, for the approval of the Governor General in Council,) "under which periodical examinations may be held in the different branches of Art and Science;" they point out, that "the function of the Universities will be to confer Degrees upon such persons as, *having been entered as candidates according to the Rules which may be fixed in this respect*," and "having produced certificates of good conduct and a regular course of study, from any of the *affiliated Institutions*" (as described,) shall pass *at the Universities* such an examination as "may be required of them;" and they desire that *the Examinations for Degrees may not include "any subjects connected with religious belief,"* and that Schools conducted by all denominations of every religious persuasion "may be affiliated to the Universities, if they are found to afford the requisite course of study and can be depended upon for the certificates of conduct."

Para. 24.

Para. 25.

Para. 26.

Para. 27.

Para. 28.

7. Further, the Hon'ble Court desire, that the detailed Regulations for the Examination for Degrees may be framed "with a due regard for all classes of the affiliated Institutions," and they observe that "the standard for common Degrees" must be "fixed with very great judgment," so that it should be "such as to command respect without discouraging the efforts of deserving students," while in the competition for Honors, care is to be taken to "maintain such a standard as will afford a guarantee for high ability and valuable attainments, *the subjects being so selected as to include the best portions of the different schemes of study pursued at the affiliated Institutions.*"

Para. 29

8. Lastly, the Hon'ble Court suggest, that Degrees should be given in Law and Civil Engineering, and special Degrees in other branches of useful learning; and that the study of the Vernacular and learned languages of India should be particularly encouraged.

Para 30
Para 31
Para 32.

9. In communicating to the Committee these observations and directions of the Court, the Governor General in Council remarked, with reference to a suggestion which had been made that there should be two Degrees in each of the subjects embraced in the design of an Indian University, that "any *one* Degree of the very low standard, which seems to be contemplated by the Hon'ble Court," that is to say, a standard below that of the Senior Government Scholarships, "would be of little value," and His Lordship in Council also left it to the Committee to consider what titles should be assigned to the several Degrees, but expressed doubts "of the expediency of adopting, in the Universities of India, the nomenclature which has, from long usage, become peculiar to the Universities of England."

10 I now proceed to explain, in a general way, so far as the Reports of the Sub-Committees leave explanation necessary, the Scheme of an University which the Committee deems suited to the present requirements of Calcutta, and which they believe may be made applicable, without any alterations of moment, to the other Presidency Towns.

11 Broadly stated, the plan of the University is as follows :—

In Arts.

1*st*—An Entrance Examination (to be held simultaneously in most of the chief Towns of the Presidency,) to which all candidates may be admitted on payment of a fee, provided they be sixteen years old or upwards, and of good moral character.

2*nd*—An Examination for the Degree of Bachelor of Arts (B. A.,) (to be held at the Presidency Town,) to which candidates may be admitted on payment of a fee, and on certificate of four, or, in special cases, three years' study, and of good moral conduct, in an affiliated Institution.

3*rd*.—An Examination for Honors in any one or more of five branches of knowledge, to be held immediately after the Examination for the Degree of B. A.

4*th*.—The Degree of Master of Arts (M. A.) conferred upon those who pass the Honor Examination, either immediately after the Examination for the B. A. Degree, or at any other time.

In Medicine.

1*st*.—An Examination in the theoretical branches of Medical Science, to which all candidates may be admitted who have passed the Entrance Examination in Arts, and have been engaged in Medical Studies for two years in a recognized School.

2*nd*.—An Examination for the Degree of Licentiate in Medicine (L. M.,) to which candidates may be admitted who have passed the first Examination, and

who have been since engaged in Medical Studies for three years in a recognized School.

3rd.—An Examination for Honors in any one or more of the chief branches of Medical Science, to be held immediately after the Examination for the Degree of Licentiate.

4th.—An Examination for the Degree of Doctor in Medicine (M. D.,) to which only such candidates may be admitted as have taken the Degree of B. A, and have been engaged for two years in the study or practice of Medicine after taking the Degree of Licentiate.

IN LAW.

1st.—An Examination for the Degree of Bachelor of Laws (B L,) to which all candidates may be admitted after one year from the date of obtaining a Degree in Arts, provided they have attended Lectures in a recognized School of Law for three years.

2nd.—An Examination for Honors, to be held at a convenient time after the preceding Examination.

IN CIVIL ENGINEERING.

1st.—An Examination for the Degree of Master of Civil Engineering (M C. E.,) to which all candidates may be admitted who have obtained the Degree of B. A., and have since passed four years in the study and practice of the profession.

2nd.—An Examination for Honors to be held shortly after the preceding Examination.

12. In framing the above Scheme, the general aim of the Committee has been to follow the plan of the London University and the instructions of the Hon'ble Court, and they have only departed from this course where sufficient grounds have been shown for adopting a different one.

13 The reasons which have led the Committee to propose, on the one hand, the substitution of the term "Entrance" for "Matriculation," as indicating the first Examination in Arts, and, on the other, the retention of the familiar designations of Bachelor of Arts and Master of Arts, are stated at pages 1 and 2 of the Arts' Sub-Committee's Report, and are concurred in generally by all the authorities who have been consulted.

14. In regard to the Entrance Examination, an opinion has been expressed in some quarters, and especially by the Government of Madras, that no such Examination is necessary; but the advantages of requiring students to pass such an Examination are generally acknowledged, and as the Committee, for the reasons given at pages 5 of the Arts' Sub-Committee's second Report, incline to this view of the question, they see no reason for departing from the instructions of the Hon'ble Court in this respect. It is provided that the Examination shall be held under proper checks, simultaneously, at several principal Towns throughout the Presidency.

15. The standard of the proposed Entrance Examination differs little from that adopted in the London University In Languages, History, and Geography, the range of study necessarily differs in its nature from that required at the London University, and is hardly equal to it either in extent or in difficulty. At London, a student, to pass his Matriculation Examination, must be acquainted not only with Greek and Latin, but with a modern European language, besides his own. Here, it is proposed, that a candidate should be examined only in two languages, of which English must be one and his own may be another. In Mathematics, three books of Euclid are proposed, instead of one ; but, on the other hand, all the Natural Philosophy required at London, except Mechanics, and all the Chemistry, are dispensed with, the Elements of Natural History being required instead It is not proposed to give Honors at Entrance

16. The standard of Examination for the B A Degree differs considerably in its nature from that adopted in the London University, but not greatly in extent or difficulty The period, however, between the Entrance Examination and that for the B. A. Degree, has been increased from two to three or four years, according to circumstances, so as to allow a student, according to his capacity, to pass through a full course of study after entrance ; and the Degree itself is not to be conferred in any case until after four years. In Languages, instead of Greek, Latin, and a modern European language, the candidate is required to pass an Examination only in two languages, of which English must be one ; the Examination being so conducted as strictly and thoroughly to test the candidate's critical knowledge of his own Vernacular tongue In History and Geography, the test is of a wider and more general character than in the London University. In Mathematics and Natural Philosophy, the range is substantially the same, while the Chemistry, which in London is required at the Entrance Examination, is here proposed as part of the test for a Degree, and in the Natural Sciences, Physical Geography has been added to Animal Physiology. Lastly, some knowledge of Mental Philosophy is required in addition to Logic and Moral Philosophy.

17. It has been objected to this standard, that it is too high, and, as the Hon'ble Court seem to deprecate a high standard for ordinary Degrees, though their views on this part of the subject were not shared by the Government of India, it is necessary that some explanation should be given of the reasons which have led the Committee to propose that so high a standard should be adopted. The Sub-Committee, at page 11 of their second Report, have observed that the papers set should be moderately high, so as to afford evidence of considerable progress and fitness for Honors in the best of the candidates ; but that a moderate amount of knowledge in each branch should suffice to secure a Degree. This is the view which the Committee take of the principle which ought to regulate the fixing of a standard and the mode of working it. The declared standard, as the Committee think, should be a maximum, such as to indicate, in each branch, the highest amount of knowledge which a student, of ordinary capacity, may be expected to acquire in a four years' course of study ; while the minimum of competence entitling to a Degree should, in the opinion of the Committee, be determined by the Examiners acting under the instructions of the Senate. Apart from the advantage of placing before the students in general, and not only the most capable portion of them, an object worthy of their best exertions, it seems that in no other way can a fair advantage be so well given to a student, whose inclination leads him to prefer one branch of knowledge to another, an inclination which the Committee think it desirable to encourage

as much as possible. Supposing, for instance, that the maximum number of marks in each branch * is 100, making 500 in all, and that the minimum of competence in each branch is 25, making 125 in all, it is clear that, if the standard be low, the student who has an average fair knowledge of all or most of the subjects, in excess of the minimum, will have an advantage over the student who has reached perfection in one or two branches, and has made but moderate progress in excess of the minimum in the rest; while, if the standard be high, the advantage, as it ought to be, will be the other way. To an ambitious student, it will be but a small consolation to take high Honors in any given branch, if he occupies a low place in the general Degree Examination; and yet, if the standard for the Degree be low, he must, in order to take a high place in the first division, pursue a course of study uncongenial to his tastes, and such as to disqualify him for the place he might otherwise take in the Honor Classes. A moderate minimum, in all branches, is necessary, both for students of generally inferior capacity, and for students of good capacity who devote themselves to one branch of knowledge to the exclusion of others, and this minimum will be determined by the Examiners; but the standard, which fixes a maximum, should be high, not only for the credit of the University, but as a means of honorable excitement to those who aspire to its distinctions. In a word, a low standard encourages mediocrity, a high standard genius.

Languages	100
History	100
Mathematics	100
Natural Sciences	100
Mental ditto	100
	500

18. For Honors after the Degree of B. A., the Sub-Committee propose a Scheme of Examination in five distinct branches, *viz.* (1) Languages, (2) History, (3) Mathematics and Natural Philosophy, (4) Natural History and the Physical Sciences, and (5) Mental and Moral Sciences. The nature of the Examination is sufficiently explained in pages 11 to 14 of the Sub-Committee's Report, and in the Scheme appended thereto. It differs from the London University Scheme, in assigning a separate branch to History, including therein Political Philosophy and Political Economy, and in establishing an Examination in the Mental and Moral Sciences, which is there reserved for the M. A. Degree. Under this last head, it is proposed to examine the students in four * subjects, which are to be compulsory, and in one, which is to be left to the selection of the candidate from the following list :—

Logic.
Philosophy of Rhetoric.
Natural Theology.
Moral and Mental Philosophy.

(*a.*) Philosophy of the Inductive Sciences.
(*b.*) Elements of Jurisprudence.
(*c.*) Philosophy of Education.
(*d.*) Evidences of Revealed Religion, as in Paley and Butler.

In the principle of this, the Committee entirely agree. A doubt has been felt, whether the introduction, though only optional, of a subject connected with Religion even in the Examination for Honors, may not be opposed to the strict terms of paragraph 28 of the Hon'ble Court's Despatch; but the Committee think that the concession is no more than fair to those Schools in which a considerable portion of the time of the students is taken up with a subject which would otherwise avail them nothing in their competition for University Honors, and that such a concession may be unobjectionably made to the earnest desire of those who, after the Government itself, are the chief promoters of secular education in India. There is an analogy between this optional Examination in the evidences of Revealed Religion, and the Examination in the Old and New Testament and Scripture

History, to which those who have obtained the Degree of B. A. may be admitted in the London University.

19. It is not proposed to hold a separate Examination for the Master's Degree, but it is intended, that every student who passes the Honor Examination in any one or more branches, immediately after passing the B. A. Examination, should at once have the Degree of Master of Arts gratuitously conferred upon him, and that students who may be able to pass the Honor Examination in any branch, at any subsequent time, should have the same Degree on payment of a fee.

20. The Scheme of Medicine, which the Committee propose, is generally the same as that adopted at the London University, the main points of difference being that candidates for the Licentiate's Degree may commence their professional studies immediately on passing the Entrance Examination, instead of waiting, as at London, two years for the B. A. Degree, and that the course of study necessary for the Licentiate's Degree is extended from four to five years, in accordance with the practice of the Medical Schools in India, and to compensate for the comparatively early age at which Medical Studies commence in this country. Two years of this course are given to theoretical and three to practical subjects: an examination is to be held in theoretical subjects after the two first years of the course, but it is not proposed to give Honors at that time: and a further Examination for the Degree is to be held at the end of the course.

21. For the Degree of Doctor of Medicine, it is proposed to require that the candidate shall have obtained not only the Degree of Licentiate or its equivalent, but also the Degree of Bachelor of Arts. It is thought desirable to limit the grant of this Degree to persons who have passed through the usual course of academical instruction, and may be supposed to possess a considerable amount of general, as well as professional knowledge. The Degree, it is expected, will usually be obtained by students who, passing the Entrance Examination at 16 and the B. A. Examination at 19 (for which special provision is made in the Arts' Scheme,) commence their Medical Studies, either immediately afterwards, or perhaps simultaneously with their general studies during the last one or two years of the course, and pass the Examination for the Licentiate's Degree at the age of 24, or, in some instances, of 22 or 23. Such students, after two years' further study or practice of Medicine, will be qualified to pass for the higher Degree, but it is not unlikely that some students may complete their medical course in the first instance, and afterwards undergo the three years' course of general study, to qualify them for the B. A., and subsequently for the M. D. Degree.

22. The second Report of the Sub-Committee on Law enters fully into the reasons which have led to the adoption of the Scheme therein proposed, in which. with the exception above indicated, the Committee entirely concur. The Committee think that there should be but one Degree in Law, namely, that of Bachelor of Laws, and that this Degree should be obtainable only by those who have already passed the B. A. Examination, and have been engaged for three full years in the study of the Law. The subjects of Examination for the Degree and for Honors should be those indicated at pages 6 and 7 of the Sub-Committee's second Report, and pages 5 and 6 of their first Report. Whether the possession of a Degree in Law is to be held a necessary qualification for admission to the Bar of the Company's Courts, or to the Judicial Service of the Company, is for the Government to determine.

23. The proposals made by the Committee on Civil Engineering, for the grant of Degrees and Honors to proficient students in that branch of Practical Science, are fully concurred in by the Committee.

24. According to the resolution of the Committee at its first sitting, the drafts of three Bills, founded generally on the provisions of the Charter of the London University, for incorporating the proposed Universities in Calcutta and the other Presidency Towns, were prepared; but it appeared to the Committee, on further consideration, that this was a matter beyond their province, and that the appointment of the Senates, and the framing of Rules for their guidance, whether under the sanction of Law or otherwise, must rest, in the first instance at least, with the Governor General in Council.

25. The Committee, having discharged their task, have only to observe again, that the Scheme they have submitted is applicable, in all its essential parts, to the Universities that may be established in the other Presidency Towns, as well to the University of Calcutta; and they would recommend that, while the Senates of the several Universities are allowed ample latitude for the adaptation of the Scheme as it may finally be sanctioned to local circumstances, their proceedings should be subject to the control of a central authority, such as the Governor General of India in Council, so that general uniformity may be observed; and that, in the words of the Government, "at each Presidency Town the same degree of acquirement in every branch of knowledge should entitle its possessor to the same kind of academical distinction and honor."

26. I ought to add, that the assent of the Members of the Committee to this Report is subject to the following qualifications. Dr. Kay, the Principal of Bishop's College, dissents from many of the arguments used in the 17th paragraph, and I believe conceives that the minimum which is to entitle a candidate to a Degree ought to be assigned. The Advocate General (Mr. Ritchie) is strongly of opinion that, if Government should determine to make a Degree in Law a necessary qualification for admission to the Bar of the Company's Courts or to the Judicial Service of the Company, the question, whether the Degree of B. A. is to be an essential condition to a Degree in Law, ought to be re-considered, and Dr. Mouat, being absent on duty from Calcutta, was not present at the last meeting of the General Committee, and has not perused this Report.

I have the honor to be,

SIR,

Your most obedient Servant,

JAMES WM. COLVILE,

President of the University Committee.

A.

CALCUTTA UNIVERSITY

FIRST REPORT OF THE SUB-COMMITTEE OF ARTS.

Report

THE Sub-Committee of Arts, consisting of the Hon'ble Mr. Grant, Messrs. Beadon, Young, Woodrow, Lees and Marshman, the Revd. Mr. Stephenson, Baboo Ram Gopaul Ghose, Pundit Isserchunder Surma, the Revd Messrs Mullens, Ogilvie and Ewart, and Dr. Mouat, have considered the matters referred to them, and submit the following Report.

Scheme generally after the model of the London University.

In accordance with the views expressed in paragraph 26 of the Hon'ble Court's Despatch of the 19th July, the Sub-Committee have taken the London University as their model, and have framed a Scheme of Examinations and Academical Degrees and Honors for the Universities of India, generally following that of the London University, but differing from it in some important points of detail. The Scheme is specially adapted to the Bengal Presidency, but it can be readily applied, *mutatis mutandis*, to Madras and Bombay.

Nomenclature

Opinion of the Government of India.

Opinion of the Government of Madras.

The question of nomenclature first occupied the Sub-Committee's attention. The Government of India has left it to the Committee to consider what titles shall be assigned to the several Degrees, but it has expressed doubts of the expediency of adopting in India the nomenclature peculiar to the Universities of England. On the other hand, the Government of Madras, in a letter of the 27th March, addressed to the Committee, has observed that, although many of the titles peculiar to English Universities are not descriptive, and are founded on obsolete usages, yet this objection is more than counterbalanced by the advantage of assigning to the graduates of the Universities in India " titles which are familiar to the educated classes throughout the British Empire, and which would at once serve to mark the grade and value of the attainments they are intended to represent."

Matriculation.

The Sub-Committee have fully resolved, on the propriety of substituting the term *Entrance* for *Matriculation*, as applied to the first Examination. The latter expression is not sufficiently descriptive, and no useful object is answered by preserving it. The only other terms about which there need be any question are *Bachelor of Arts* (B. A.) and *Master of Arts* (M. A.)

Bachelor of Arts.

Although the former of these is non-descriptive, and to that extent objectionable, yet a designation so familiar, and of such well and widely-understood conventional meaning, as that of B. A., would be far more acceptable to the graduates and to the public in general than any other that could be substituted for it; and there seems no sufficient reason for denying to

the Indian student a coveted verbal distinction of this nature, if the proficiency by which he earns it be on the whole as high, and the Examination by which that proficiency is tested be as strict, as those by which the same distinction is obtained in the Universities of the United Kingdom and other parts of the civilized world. It seems also undesirable, and in some degree inconsistent with the object of founding Universities in India, to adopt, for the first and principal academical distinction a title which may be held to imply intellectual disparity between those who attain that distinction in India and those upon whom it is conferred in other parts of the British Empire.

Alternative.

Considering the difference in the subjects embraced by the courses of study in India and in Europe, the standard of Examination proposed by the Sub-Committee is calculated on the whole to elicit as high a degree of proficiency as the corresponding standards of the Universities of Europe, and they are therefore of opinion, that the title of *Bachelor of Arts* (B. A.) should be preserved and adopted in the Indian Universities. If this opinion be over-ruled, the Sub-Committee think that the next best title for the first Degree is that of *Graduate of Arts* (G. A.)

Master of Arts.

For the above reasons, and also because the title is eminently descriptive, the Sub-Committee would preserve and adopt the title of *Master of Arts* (M. A.) for the second Degree.

Entrance Examination.

The Hon'ble Court, in paragraph 27 of their Despatch, clearly contemplate an Entrance Examination, but they suggest that some mode of Examination should be devised, whereby the attendance of Candidates at the University should be rendered unnecessary. The Government of Madras is of opinion, hat the Matriculation or Entrance Examination should be entirely dispensed with as unnecessary, and also that the Examinations for Degrees and Honors should be open to all persons who can produce satisfactory testimonials of moral character, and of having prosecuted a course of study in one or more of the branches of knowledge in which the Degrees are to be conferred.

Government of Madras would dispense with it and with affiliation.

Affiliation desirable.

In neither respect do the Sub-Committee see any reason for departing from the plan of the London University as adopted at its foundation and maintained to the present day. In the present state of Education in India, they think it especially desirable that affiliation to the Universities should be used as a means of improving existing Institutions, and of encouraging the establishment of others on an efficient footing. This object, it is expected, will be attained by the inducement thus held out to such Institutions to adopt in their curriculum of study the subjects in which Candidates for Degrees are to be examined, and by the necessity imposed upon Candidates for resorting to Colleges and Schools in which an improved course of study has been established. But it is not necessary that a student should be connected with any affiliated Institution at the time of passing the Entrance Examination. It will suffice here, as in the London University, that a Candidate for entrance should be of good moral character, and should be at least sixteen years of age.

Entrance Examination to be retained

In regard to the opinion of the Government of Madras, that the Entrance Examination should be altogether dispensed with, the Sub-Committee think that such a modification of the London University system, without possessing any special countervailing advantage, would, if adopted, defeat several useful objects to which the Entrance Examination conduces. The Sub-Committee deem it a point of much importance, that students should be led at an early age to prepare themselves for succeeding at an University Examination, and to prove in a public and marked manner their fitness to enter upon the course of study by which they are to qualify themselves for a Degree. Moreover, success at the Entrance Examination is of itself, in the nature of a distinction, indicating some progress in learning, and affording a credential of certain value to those whose circumstances may not admit of their carrying on their studies to the point which would entitle them to a Degree. The difficulty suggested by the Hon'ble Court has been provided for by ruling that Examinations for Entrance may be held simultaneously at Calcutta, (or Madras, or Bombay,) and also, under prescribed checks, at certain specified places in the interior of the Presidency, where the means exist of ensuring careful supervision by responsible Officers.

The Sub-Committee propose to fix the admission fee for the Entrance Examination at the comparatively low rate of five Rupees, in order to meet the circumstances of the generality of the students, but they think that, in case of failure, a like fee should be required for every second or subsequent Examination.

Standard of the Entrance Examination.

The nature of the Entrance Examination proposed by the Sub-Committee does not in most respects differ very materially from that in force in the London University. In Mathematics the Sub-Committee propose a somewhat higher standard, in consideration of the earlier age at which Mathematical studies are usually commenced in India. It is also intended to require some knowledge of Natural History in the Animal and Vegetable kingdoms. On the other hand, the higher subjects in Natural Philosophy required at the Matriculation Examination in the London University, and also Chemistry, are omitted.

Languages.

The great difficulty, however, which the Sub-Committee have had, is in fixing the test of admission in Languages. This difficulty arises from the circumstance, that whereas in England English is the only Vernacular and Latin and Greek the only Classics, in the Bengal Presidency alone there are (apart from numerous dialects and aboriginal barbarous tongues) three main Vernacular languages, namely, Hindee, Bengali and Burmese, two Classical languages of high philological value, namely, Arabic and Sanscrit, besides the Occidental Classics, while English must be regarded in some cases as a Classical, in others as a Vernacular language.

English
Latin.
Greek.
Arabic.
Persian.
Sanscrit.
Bengali.
Hindee.
Burmese.

As respects the Entrance Examination, the Sub-Committee have come to the conclusion, that the plan which is on the whole the best, that is to say, the one least liable to objection, is to require each Candidate to pass in two of the languages noted in the margin, of which English must be one. Under this rule, it is supposed that the students of the Schools at the Presidency towns and hill sanitary stations, where the Western Classics are taught, will usually pass in English and Latin, or in English and

Greek, or possibly in English and one of the Indian Vernaculars; ordinary Hindoo students in English and Bengalee or Hindee; Hindoo students of the Pundit class in English and Sanscrit; ordinary Mahomedan students in English and Persian or Urdoo (a variety of Hindee;) Mahomedans of the Moulavy class in English and Arabic; and students from the Burmese Provinces in English and Burmese.

Honors at Entrance not proposed.

The Sub-Committee are unanimous in thinking, that an Examination for Honors at Entrance is quite unnecessary. They are of opinion that the standard of the Entrance Examination papers should be moderately high, so that the being placed by the Examiners in the first division should be evidence of considerable academical progress at the age of sixteen, the minimum age of admission; but that more than this is not required. And they think that a moderate amount of knowledge in each branch should be sufficient to give Candidates a place in the second division, and thus enable them to study for the Degrees. As the Sub-Committee propose no maximum age of admission, it is necessary that, in every certificate, there should be inserted the age of the successful Candidate, as nearly as it can be ascertained.

Senates to affiliate.

According to the desire expressed in the Hon'ble Court's Despatch, and in conformity with the plan of the London University, the Sub-Committee recommend that the Senates should proceed immediately to the formal recognition of such Colleges and Schools, both public and private, as may fulfil the conditions necessary for affiliation to the several Indian Universities; and they suggest that every Institution affiliated to one University should be recognized by all, so that the students of each Institution may be free to go up for their B. A. Examination at whichever University they may prefer. In addition to the Colleges and Schools mentioned in the 37th paragraph of the Despatch, the Senates should be prepared to recognize any respectably conducted School, at which the curriculum of study may be such as to qualify its students to compete for Degrees.

Examination for B. A. Degree.

It is proposed to admit to the Examination for the B. A. Degree, at any Indian University, those who have passed the Entrance Examination at that or any other Indian University, and have prosecuted their studies at any one of the affiliated Institutions for at least four years subsequent to entrance. And it might also be competent to the Senates, in rare and special cases, to admit to this Examination students who, though not belonging to an affiliated School, can satisfy the Senate, that they have pursued a regular course of study under qualified tuition at least four years subsequent to Entrance, and that they are of good moral character. It is proposed to exclude from the Honor Examination all those who fail to come up for a Degree Examination within five years from the date of Entrance.

The Sub-Committee are further of opinion, that during the first three years of the existence of the Universities, the Senates should exercise the power of admitting persons to the Examination for the Degree of B. A., one, two, or three years after they have passed the Entrance Examination, provided they have completed the prescribed four years' course of study at an affiliated Institution, and are certified by the authorities thereof to be fit for the Degree Examination.

Standard of Examination for B. A. Degree.

The nature of the proposed Examination for the B. A. Degree has now to be explained.

Languages.

In the subject of Languages, the Sub-Committee have found here, as in the Entrance Examination, their greatest difficulty.

In the London University, every Candidate for the B. A. Degree is required to possess a knowledge of four languages at least, that is to say, of two Classical languages Latin and Greek, of his own Vernacular language, and of either French or German. The Examination however, strictly speaking, is held only in three languages, two Classical and one modern foreign language, the knowledge which the Candidates possess of their own Vernacular, English, being evinced by translations and by their answers to the Classical papers.

English.
Latin.
Greek.
Arabic.
Persian.
Sanscrit.
Bengalee.
Hindee.
Burmese.

For a B. A. Degree in India, the Sub-Committee think it sufficient, so far as languages are concerned, that the Candidates, as at Entrance, should be required to pass in at least two of the languages noted in the margin, of which English must be one. Under this plan, the students of the Anglo-Indian Schools, it is expected, will generally pass in English and Latin ; Mahomedan students in English and Persian or Urdoo , and Hindoo students in English and Bengalee or Hindee. The Sub-Committee strongly recommend, that every Candidate should be required to possess a critical knowledge of his own Vernacular language, and that the Examination should be so conducted as to put this knowledge strictly and thoroughly to the test. For the Honor Examination, the Sub-Committee would further make it compulsory on every student to pass in a second Classical language; so that, to obtain Honors in languages, every Anglo-Indian student, generally speaking, should undergo an Examination in Latin and Greek, as well as in his own Vernacular, English; every Hindoo student in English and Sanscrit, besides his own language ; and every Mahomedan student, in English and Arabic, as well as in Persian or Urdoo. Each Candidate for a Degree will thus be required to know two languages, and each Candidate for Honors one language, less than every Candidate for a Degree or for Honors at the London University is required to know.

Sanscrit and Arabic.

The Sub-Committee have felt some hesitation in proposing to require a knowledge of Sanscrit from Hindoo students, and of Arabic from Mahomedans, in addition to a knowledge of English, even for the Honor Examination, not because they doubt the propriety or advantage of the plan, but because it militates against pre-conceived opinion upon the subject, and will perhaps render some change in the system of instruction now pursued both in Government and in private Institutions necessary. But the Sub-Committee are persuaded, that the chief reason why the students of our Anglo-Vernacular Schools and Colleges have failed to produce men who are able to communicate to their fellow-countrymen the knowledge they themselves have acquired, is that the students of those Institutions are for the most part ignorant of any one of the Classical languages of the country, without some knowledge of which they can neither acquire a critical knowledge of their own Vernacular, nor command that respect which attaches only to men who are esteemed learned by the public. The Sub-Committee are of opinion that, during the proposed course of four

years, any student may acquire a knowledge of either Arabic or Sanscrit fully equal to the knowledge of Occidental Classics ordinarily possessed by graduates at the English Universities, and quite sufficient to entitle him to pass the Honor Examination without prejudicial interference with his English studies, or with the acquirement of scientific knowledge. The time has passed when Sanscrit had to be learned by the antiquated method, according to which it was said to take twenty-five years to master the grammar alone. That language is now actually taught, and Arabic may be taught, on the same simple plan as that on which the learned languages of Europe are taught, and either language may be learned with no greater amount of trouble or difficulty than Latin or Greek. And it seems to the Sub-Committee, contrary to the spirit in which the plan of an University should be conceived, to grant Honors in learning to students who are not regarded as learned by any persons with whom they come in contact, and especially not by their own countrymen, whose enlightenment is the chief object of their education. The Sub-Committee fully participate in the Hon'ble Court's desire, that, so far as the direct efforts of the Government are concerned, the higher branches of European knowledge should be communicated to the Natives of this country through the medium of English, but they desire to combine with that principle one no less important in itself and essential to the full development of the other, namely, that those who are instructed in European knowledge, through the medium of English, should also be instructed in one or other of the learned languages of their own country, as the only means whereby they can communicate their European knowledge, in an acceptable form, whether by translations or by original compositions, to the mass of the people.

Mathematics.

In Mathematics and Natural Philosophy, the standard of the London University has been altered only by introducing the subjects of Acoustics and Optics, and slightly modifying the course in Astronomy.

Moral and Physical Sciences.

It is proposed to adopt nearly the same standard for the Mental and Moral Sciences as that laid down by the London University, and in the Physical Sciences, to include Animal and Vegetable Physiology, Physical Geography, and Chemistry, subjects which, in the London University, are either introduced into the Matriculation Examination or are reserved for Honors.

The Sub-Committee are of opinion that, as in the Entrance Examination, so in the Examination for the B. A. Degree, the standard of the papers should be moderately high, so as to afford, in regard to the candidates placed in the first division, evidence of considerable academical progress and fitness for the Honor Examination ; but that a moderate amount of knowledge in each branch should suffice to secure the candidates a place in the second division, and a Degree.

Honors.

It seems to the Sub-Committee that there should be four distinct branches of learning in which Honors may be taken by any person who passes the Examination for the B. A. Degree, and is placed by the Examiners in the first division These are :—

1. Mathematics and Natural Philosophy.
2. Languages, including History and Political Geography.
3. Physical Sciences.
4. Mental and Moral Sciences.

And every Candidate who obtains Honors in any one or more of these four branches should, in the opinion of the Sub-Committee, be entitled at once to the higher Degree of M. A., without payment of any fee. The papers for the Honor Examination should be of a very high standard in each branch, but the students should be divided into three classes, those of each class being arranged in order of merit, and the Examination should be so conducted, as that a student of ability and application should, after a collegiate course of four years, be able to find a place in the third class. The Sub-Committee would also recommend, that the first student of the first class in each branch should receive a Gold Medal and a prize of Books to the value of one hundred Rupees, and that the second student of the first class in each branch should receive a Silver Medal and a prize of Books to the value of one hundred Rupees.

Examination for M. A. Degree.

The Sub-Committee propose to dispense altogether with the special or separate Examination for the Degree of Master of Arts, and to prescribe in its stead, as equivalent, the Examination for Honors at the B. A. Degree. In no case would they confer the M. A. Degree without Examination, but they propose this distinction. They would confer the Degree of M. A. immediately and gratuitously on those who, in the same year, take Honors in any one or more of the prescribed branches of knowledge at the B. A. Degree. They would also confer it, on payment of a fee, upon any person who has passed the B. A. Examination, and who in any subsequent year, may pass the Honor Examination in any one of the appointed branches; but they would allow such a student no other honor, however high his position might be on the passed list. In conformity with this view, they propose that the interval between the Entrance Examination and that for the B. A. Degree shall be four full academical years, that being the period necessary, in the opinion of the Sub-Committee, for a student to go through a complete College course, and fit himself thoroughly for the Degree and Honor Examinations.

Reservation.

It is to be observed, that although all the members of the Sub-Committee agree generally in the views expressed in this Report, yet the conclusions arrived at on several important points are the conclusions of the majority, and each member of the Sub-Committee reserves to himself the liberty of expressing an opinion at variance with those contained in this Report, when the subject comes to be discussed before the Committee at large.

J. P. GRANT.
C. BEADON.
W. G. YOUNG.
F. J. MOUAT.
W. N. LEES.
J. C. MARSHMAN.
H. WOODROW.
W. STEPHENSON.
J. MULLENS.
D. EWART.
J. OGILVIE.
RAM GOPAUL GHOSE.
ISSERCHUNDER SURMA.

CALCUTTA,
The 24th June 1855.

CALCUTTA UNIVERSITY

ARTS.

ENTRANCE EXAMINATION.

THE Entrance Examination shall take place once a year, and shall commence on the first Monday in March.

The chief Examination will be held in Calcutta, but Candidates may be examined at any of the under-mentioned places, *viz.* Berhampore, Dacca, Patna, Cuttack, Benares, Agra, Delhi, Ajmere, Lahore, and any other places hereafter to be appointed by the Senate.

No Candidate shall be admitted to the Entrance Examination, unless he has completed his sixteenth year, but any one above that age may be a Candidate, wherever he may have been educated.

Every Candidate must apply, either to the Registrar, at least fourteen days, or to the Secretary to the Local Committee of Public Instruction, at any of the places above mentioned, at least two months, before the Examination begins; and, with his application, must produce satisfactory testimony, that he is at least sixteen years old and of good moral character.

An Entrance Fee of five Rupees shall be paid by each Candidate, and no Candidate shall be examined, unless he has previously paid this fee, either to the Registrar, or to the Secretary to the Local Committee, at one of the above-mentioned places. If a candidate fail to pass the Examination, the fee shall not be returned to him, and he may be admitted to any one or more subsequent Entrance Examinations on payment of a like fee of five Rupees on each occasion.

The Examination shall be conducted by means of printed papers, which shall be the same for all places in the interior as Calcutta, and may include a paper of questions to be asked and answered orally.

Candidates for Entrance shall be examined in the following subjects :—

I. LANGUAGES.

Two of the following languages, of which English must be one, *viz.:*

English.

Greek.	Sanscrit.
Latin.	Bengalee.
Arabic.	Hindee.
Persian.	Burmese.

In each of the above languages, there shall be one subject in prose and one in poetry, to be selected by the Senate one year-and-a-half previous to the Examination, from the works of the under-mentioned authors, or from the under-mentioned works:

English.

Pope, Cowper, Scott, Campbell, Addison, Johnson, Goldsmith, Southey, DeFoe.

Greek.

Homer, Xenophon

Latin.

Virgil, Horace, Sallust, Cæsar, Livy, Cicero.

Arabic.

Alif Laila, Nafhat al Yaman.

Persian

Gulistan, Bostan. Yusuf-o-Zulaikha, Akhlah-i-Muhsini, Anvari Suhaili.

Sanscrit.

Raghuvansa, Kumara sumbhava.

Bengalee.

Tota Itihas, Life of Raja Krishna Chundra Roy, Arabian Nights, Ramayun Adyakando.

Hindee.

Burmese.

The papers in each language shall include Questions on Grammar and Idiom.*

Easy sentences from each language shall be translated into the other language in which the candidate is examined.

It shall be indispensable for passing the Examination in any language, that each Candidate answer the questions and translate the sentences in a manner generally satisfactory to the Examiners.

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* For Bengalee, Rammohun Roy's or Dr. Yates', or Shamachurn Sirkar's Grammar may be used.

II. Mathematics and Natural Philosophy.

Arithmetic and Algebra.

The ordinary Rules of Arithmetic.
Vulgar and Decimal Fractions.
Extraction of the Square-root.
Addition, Subtraction, Multiplication, and Division of Algebraical Quantities.
Proportion.
Simple Equations.

Geometry.

The first three books of Euclid.

**Mechanics.*

Composition and Resolution of Statical Forces.
The simple Mechanical powers, with the ratio of power to weight in each.
Definition of the Centre of Gravity.

III. History and Geography.

The Outlines of History, as contained in Kerney's Compendium, or Marshman's Brief Survey, and in Murray's History of India, or other similar works.

A general knowledge of Geography, and a more detailed knowledge of the Geography of India.

The answers to be given in one of the languages in which the Candidate is examined

IV. Natural History.

A general knowledge of the habits and characteristics of vertebrated animals, as described in Patterson's "Zoology for the Use of Schools," or in any similar work.

General eonomy of vegetation and the simple or elementary organs of plants, as contained in the first 46 Sections of "Vegetable Physiology" in Chambers's Course, or in any similar work.

The Examinations shall be Conducted in the following order, *viz.:*

(To be filled up by the Senate.)

At the close of each day's Examination, at any places in the interior above-mentioned, the answers of each Candidate shall be sealed up by the Secretary to

* Only a popular knowledge of this subject is required.

the Local Committee of Public Instruction, and forwarded immediately to the Registrar.

Candidates will not be approved by the Examiners, unless they show a competent knowledge of all the subjects in which they are examined.

On the morning of the fourth Monday after the Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed, and to each passed Candidate shall be given a certificate signed by the Registrar, setting forth his age, and the division assigned him by the Examiners.

BACHELOR (OR GRADUATE) OF ARTS.

The Examination for the Degree of Bachelor (or Graduate) of Arts shall take place once a year, and commence on the first Monday in April.

No Candidate shall be admitted to the Examination for the Degree of B. A. or (G. A.) within four academical years of the time of his passing the Entrance Examination.

No Candidate shall be admitted to this Examination, unless he produce satisfactory testimonials from the authorities of one of the Colleges or Schools affiliated to the University (1) of moral character, and (2) of having prosecuted, for not less than four years after passing the Entrance Examination, a course of study in one of such Institutions.

Every person who has passed the Entrance Examination at either of the Universities of Madras or Bombay shall be admitted to the Examination for the Degree of B. A. (or G. A.) in the Calcutta University, provided he shall first satisfy the Registrar that he is of good moral character, and that he has prosecuted for not less than four years, after passing the Entrance Examination, a regular course of study in one of the Institutions affiliated to either of those Universities.

Applications must be made, and certificates forwarded, to the Registrar, at least fourteen days before the Examination begins.

The fee for the Degree of B. A. (or G. A.) shall be twenty-five Rupees. No Candidate shall be admitted to the Examination, unless he have previously paid this fee to the Registrar. If a Candidate fail to pass the Examination, the fee shall not be returned to him, and he may be admitted to any one or more subsequent Examinations on payment of a like fee of twenty-five Rupees on each occasion.

The Examination shall be conducted chiefly by means of printed papers, but the Examiners may also put *vivâ voce* questions to any candidate in the subjects in which they are severally appointed to examine.

Candidates for the Degree of B. A. (or G. A.) shall be examined in the following subjects :

I. Languages.

Two of the following Languages, of which English must be one :

English.

Latin.	Persian.
Greek.	Bengalee.
Sanscrit.	Hindee.
Arabic.	Burmese.

In each of the above languages, one subject in prose and one in poetry shall be selected by the Senate two years previous to the Examination, from the works of the under-mentioned authors, or from the under-mentioned works :

English.

Milton, Shakespeare, Dryden, Pope, Young, Thomson.

Bacon, Swift, Addison, Johnson, Goldsmith, Burke, Southey, Macaulay, or any other Classical author approved by the Senate.

Latin and Greek.

Homer, Sophocles, Euripides, Herodotus, Thucydides, Xenophon, Demosthenes, Plato, Virgil, Horace, Cæsar, Cicero, Livy, Tacitus.

Sanscrit.

Raghuvansa, Kumarasumbhava, Kiratarjuniya, Viracharita, Uttaracharita, Mudrarakshasa.

Arabic.

Alif Lailah, Nafhat al Yaman, Ikhwan al Safa, Soyooti's Tarikh al Kholfa, Tarikh Yamini.

Persian.

Sekandar Nameh, Gulistan, Dewan of Hafiz, Akhlaq-i-Jalali (or Nasiree,) Dewan of Orfi, Aboo-al-Fazl's Letters.

Bengalee.

Batrish Singhasan, Purush Parikhya, Betal Panchabingshati, Probodh Chundrika, Mahabharut, Ramayun, Meghaduta, Sakantala, Annada Mangal.

Hindee.

Burmese.

The papers in each language shall include Grammatical Questions.

Sentences from each language (except from English when English is taken up together with Latin and Greek) shall be translated into any other language which the Candidate may select as his Vernacular.

History.

The History of England, (including that of British India,) to the end of 1815.
The History of Greece, to the death of Alexander.
The History of Rome, to the death of Augustus.
Elphinstone's History of India.

Geography.

The Historical Questions will include the Geography of the countries to which they refer.

II. Mathematics and Natural Philosophy.

Arithmetic and Algebra.

The ordinary Rules of Arithmetic.
Vulgar and Decimal Fractions.
Extraction of the Square-root.
Addition, Subtraction, Multiplication, and Division of Algebraical Quantities.
Algebraical Proportion and Variation.
Permutations and Combinations.
Arithmetical and Geometrical Progression.
Binomial Theorem.
Simple and Compound Interest, Discount, and Annuities for terms of years.
Simple and Quadratic Equations, and questions producing them.
The nature and use of Logarithms.

Geometry.

The first six books of Euclid, and the eleventh book to Prop. XXI. with deductions. Conic Sections.

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* For Sanscrit, Isserchunder Surma's two Grammars; and for Bengalee, Rammohun Roy's, Dr. Yates', or Shamachurn Sirkar's Grammar may be used.

Plane Trigonometry.

Solution of all cases of Plane Triangles.
The expression for the Area of a Triangle in terms of its sides.

Mechanics.

Composition and Resolution of Forces.
The Mechanical Powers.
The Centre of Gravity.
The general laws of Motion.
The motion of falling bodies in free space and down inclined planes.

Hydrostatics, Hydraulics and Pneumatics.

Pressure of liquids and gases, its equal diffusion and variation as the depth.
Specific Gravity.
Description and explanation of the barometer, siphon, common pump, forcing-pump, air-pump, and steam-engine.

Acoustics.

Nature and properties of sound.

Optics.

Laws of Reflection and Refraction.
Formation of images by simple lenses.

Astronomy.

Elementary knowledge of the solar system, including the phenomena of Eclipses.

III. Physical Sciences.

Chemistry.

The Atmosphere, its general nature and condition, its component parts—Oxygen and Nitrogen; their properties, water and carbonic acid; proportion of these substances in the air.
Chlorine and Iodine, as compared with Oxygen.
Water; its general relation to the atmosphere and earth; its natural states and relative purity; sea water, river water, spring water, rain water, pure water; effects of heat and cold on it; its compound nature; its elements.
Hydrogen; its nature and proportion in water; its pressure in most ordinary fuels; its product when burnt.
Sulphur; phosphorus, and carbon, generally.
Nitric acid, sulphuric acid, carbonic acid; their elements.

Hydrochorlic or muriatic acid.
Alkalies, earths, oxydes, generally.
Salts; their nature generally; sulphates; nitrates; carbonates.
Metals generally; iron, copper, lead, tin, zinc, gold, silver, platinum, mercury.
Powers of matter; aggregation; crystallization; chemical affinity; definite equivalents.
Combustion; flame; nature of ordinary fuel; chief results of combustion, *i. e.* the bodies produced.
Heat; natural and artificial sources; its effects; expansion; solids, liquids, gases, thermometer, conduction, radiation, capacity, change of form, liquefaction, steam.

Animal and Vegetable Physiology.

As contained in Chambers's Educational Course, or any similar work.

Physical Geography.

Hughes's Physical Geography.

IV. Mental and Moral Sciences.

Logic.

Whately's Easy Lessons on Reasoning.

Moral Philosophy.

Aborcrombie's Intellectual and Moral Philosophy.

Candidates shall not be approved by the Examiners, unless they show a competent knowledge in all the above-mentioned branches of Examination, *viz.* :

1.—Languages, including History and Geography.
2.—Mathematics and Natural Philosophy.
3.—Physical Sciences.
4.—Logic and Moral Philosophy.

The Examinations for the Degree of B. A. (or G. A.) shall be conducted in the following order :—

On the morning of the second Monday after the Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed. Those in the first division shall be recommended for the Examination for Honors.

For the first three years after the University shall have been established, Candidates will be admitted to the Examination, for a Degree of B. A, who have passed the Entrance Examination and can produce certificates showing, that in previous years, they have completed a term of four years' study in one of the affiliated Institutions, and that they are of good moral character.

EXAMINATION FOR HONORS.

Any Candidate who has been placed in the first division at the Examination for the Degree of B. A. (or G. A.), provided he have not delayed proceeding to the Examination for that Degree more than the shortest period allowed from the date of passing the Entrance Examination, may be examined for Honors in any one or more of the following branches :—

1.—Languages, including History and Political Geography.
2.—Mathematics and Natural Philosophy.
3.—Physical Sciences, including Natural History (Animal, Vegetable and Mineral,) Chemistry, Heat and Electricity, and Physical Geography.
4.—Mental and Moral Sciences, including Moral and Mental Philosophy, Logic, Political Philosophy, and Political Economy.

Candidates for Honors in LANGUAGES shall be examined in Latin and Greek, or in English and Arabic, or in English and Sanscrit; and in the following subjects :—

English.

Milton, Shakespeare, Spenser, Dryden, Pope, Wordsworth, Addison, Johnson, Hume, Bacon, Swift, Burke, Erskine, Macaulay.

Latin and Greek.

Homer, Æschylus, Sophocles, Aristophanes Euripides, Thucydides, Herodotus, Plato, Aristotle, Æschines, Demosthenes.

Virgil, Horace, Juvenal, Persius, Plautus, Terence, Lucretius, Cicero, Tacitus.

Arabic.

Alif Lailah, Nafat al Yaman, Ikhwán al Safa, Taríkh al Kholfa, Taríkh Yamíní, Hamásah Maqámát Harírí (one-half,) Dewán Ibn Fáríz.

Sanscrit.

Raghuvansa, Kumārasambhava, Kirātarjuníya, Sisúpálavadha, Viracharita, Uttaracharita, Mudrārākshasa, Sákuntalá, Kádambiri, Part I.

The Examination shall include translation into prose in any Vernacular language, and re-translation in prose from any Vernacular language. It shall also include composition in any Vernacular language upon questions arising out of the authors selected for Examination, and questions in Philology.

The Examination shall take place on the Tuesday, Wednesday, and Thursday following the day on which the result of the Examination for the B. A. (or G. A.) Degree is declared,

The Examiners shall publish, in the course of the ensuing week, a list of the Candidates who acquit themselves to their satisfaction, in the order of proficiency, and arranged in three classes. Candidates shall be bracketed, unless the Examiners are of opinion that there is a clear difference between them.

In determining the relative position of Candidates, the Examiners shall have regard to their proficiency in Languages, History, and Geography, as evinced at the B. A. or (G. A.) Examination.

Candidates for Honors in MATHEMATICS and NATURAL PHILOSOPHY shall be examined in the following subjects:—

Algebra, including the theory of Equations.
Analytical Geometry, plane and solid.
Differential and Integral Calculus.
Calculus of finite differences.
Spherical Trigonometry.
Theory of Probability.
Statics and Dynamics.
Hydrostatics.
Hydraulics and Pneumatics.
Optics.
Astronomy.

This Examination shall take place on Tuesday, Wednesday, and Thursday in the week following the Examination for Honors in Languages.

The Examiners shall publish, in the course of the ensuing week, a list of the candidates who acquit themselves to their satisfaction, in the order of proficiency, and arranged in three classes. Candidates shall be bracketed together, unless the Examiners are of opinion that there is a clear difference between them.

In determining the relative position of Candidates, the Examiners shall have regard to their proficiency in Mathematics and Natural Philosophy, as evinced at the B. A. (or G. A.) Examination.

Candidates for Honors in the PHYSICAL SCIENCES shall be examined in the following subjects:—

Natural History (Animal, Vegetable and Mineral,) including Comparative Anatomy, Botany, Geology and Mineralogy.
Chemistry.
Heat.
Electricity.
Physical Geography.

Candidates for Honors in the MENTAL and MORAL SCIENCES shall be examined in the following subjects :—

Moral Philosophy.
Mental Philosophy.
Logic.
Political Philosophy.
Political Economy.

The Examination for Honors in the Physical Sciences shall take place in the week immediately following the Examination for Honors in Mathematics and Natural Philosophy ; and that for Honors in the Mental and Moral Sciences, in the week next but one following the same Examination.

The Examiners shall publish, in the course of the week following the Examinations for Honors in the Physical and Mental and Moral Sciences respectively, a list of the Candidates who acquit themselves to their satisfaction, in order of proficiency, and in three classes. Candidates shall be bracketed, together, unless the Examiners are of opinion that there is a clear difference between them.

In determining the relative position of Candidates for Honors in the Physical and Mental and Moral Sciences, the Examiners shall have regard to their proficiency in the same subjects as evinced at the B. A. (or G. A.) Examination.

The first student of the first class in each subject shall receive a Gold Medal and a prize of Books to the value of One hundred Rupees, and the second student of the first class in each subject shall receive a Silver Medal and a prize of Books to the value of One hundred Rupees ; provided that their answers are considered by the Examiners to possess sufficient merit.

MASTER OF ARTS.

Every person who, immediately after passing the B. A. (or G. A.) Examination, obtains Honors in any one or more of the above-mentioned four branches of knowledge, shall be entitled to the Degree of MASTER OF ARTS without further examination or fee.

Any other Graduate of this, or any other Indian University, or of any of the Universities of the United Kingdom, may be admitted to the Examination for the Degree of M A. on payment of a fee of fifty Rupees.

No special Examination will be held, but the Candidate must pass the Honor Examination in at least one of the prescribed branches of knowledge.

If a Candidate fail to pass the Examination, the fee will not be returned to him, and he may be admitted to any one or more subsequent Examinations, on payment of a like fee of fifty Rupees on each occasion.

No successful Candidate for the Degree of M. A., except such as obtain honors immediately after passing the B. A. Examination, shall be classed, or be entitled to any Honor or reward; but he shall receive with his Degree a certificate setting forth the subject in which he was examined.

GENERAL.

No question shall be put at any University Examination, so as to require an expression of religious belief on the part of the Candidate; and no answer or translation given by any Candidate shall be objected to on the ground of its expressing any peculiarity of doctrinal views.

B.

REPORT OF THE SUB-COMMITTEE OF MEDICINE.

Rules of London University generally followed.

In framing Rules for the granting of Medical Degrees in the Calcutta University, we have deviated as little as possible from those of the London University, being convinced that the latter, with the few changes of detail noted, are well suited for Indian Schools of Medicine.

Four years sufficient for acquiring a practical knowledge of Medicine.

We are of opinion that, although Medicine is taught in India in a language foreign to the majority of the students, an adequate professional knowledge, for all practical purposes, can be acquired by pupils of average capacity in four years. To extend that period will, we think, exclude many who cannot afford to pass a greater number of years in the acquisition of professional information, without any return for the expenditure of time and labor.

The advantages afforded by the Medical Profession are not yet sufficient to induce the best scholars of Indian Colleges to devote themselves to its study and practice.

Title of lower Degree to be Graduate

We are of opinion, that the title of Graduate of Medicine should be retained for the lower Degree, and that it should confer no personal appellation upon the holder, such as the designation of Doctor, which is erroneously assumed by, and allowed by, courtesy to Bachelors of Medicine in English Universities.

Title of higher Degree to be Doctor.

The style of Doctor should belong only to those who have taken the higher Degree, for reasons which seem to us to be self-evident.

Rewards to be of higher value than in London University

We have increased the value of the rewards for proficiency afforded by the London University, as it appears to us, that the pursuit of Medicine, as a profession, still needs considerable encouragement from the State in India.

No fees to be paid for Degrees.

For the same reason, we have imposed no payment of fees for Degrees in Medicine.

Additional benefit should be conferred on holders of Doctor's Degree.

We believe that the best students of the Indian Universities would remain to complete the extended course of study required for the Degree of Doctor of Medicine, if additional benefits were thereby conferred on those who entered the Service of the Government, such as placing them at once in the First Class of Sub-Assistant Surgeons, and advancing

them to higher and more responsible offices, with larger salaries than are at present assigned to that class of public servants.

Standard of admission to study should be gradually raised.

We are of opinion, that as Education becomes more extended, the standard of admission of pupils who study Medicine should gradually be raised, until at length the possession of a Degree in Arts should become essential for every Candidate for Medical Degrees.

Standard in England too low.

The character of the profession in Great Britain, as a learned body, has undoubtedly been lowered by the low standard of preliminary education required by most bodies who have been entrusted with the granting of Degrees and Diplomas.

Sound preliminary training necessary.

For the higher walks of the profession, we are convinced that the soundest preliminary training is necessary, and we hope that, in the future progress of Education in India, the possession of the Degree of Doctor of Medicine of the Eastern Universities will be a proof of the possession of general scholarship, as well as of purely professional knowledge of a high order.

K. MACKINNON, M. D., } *Sub-Committee of*
FRED. J. MOUAT, M. D., } *Medicine.*

CALCUTTA,
June 1st, 1855.

MEDICINE.

Qualification of Candidates for Bachelor's Degree.

Candidates for the Degree of Bachelor (Graduate) of Medicine shall be required—

1. To have been engaged during four years in their professional studies at a School of Medicine.

2. To have passed the Entrance Examination of the Faculty of Arts of the University of Calcutta,* previous to commencing the study of Medicine.

3. To pass two Examinations.

FIRST EXAMINATION.

The FIRST EXAMINATION shall take place once a year, and commence in the third week of March.

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* This Examination, it is understood, may be passed at the Provincial affiliated Institutions.

Certificates required from Candidates for First Examination

No Candidate shall be admitted to this Examination, unless he have produced Certificates to the following effect :—

1. Of having completed his eighteenth year.

2. Of having been engaged in Medical Studies for at least two academic years.

3. Of having attended Courses of Lectures on the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY ...	... *Two Courses.*
GENERAL ANATOMY AND PHYSIOLOGY ...	... *One Course.*
CHEMISTRY	.. *Two Courses.*
BOTANY	... *One Course.*
MATERIA MEDICA	... *One Course.*

4. Of having dissected during Two Winter Terms, and of having completed at least Twelve Dissections during each of those Terms.

5 Of having attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of General and Pharmaceutical Chemistry ; in applying tests for discovering the adulteration of articles of the Materia Medica and the presence and nature of poisons ; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c.

6. Of having attended to Practical Pharmacy for at least Three Months, producing a Certificate of having acquired a practical knowledge of the preparations and compounding of medicines.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

Subjects of Examination.

Candidates shall be examined in the following subjects :—

ANATOMY.	BOTANY.*
PHYSIOLOGY	MATERIA MEDICA AND PHARMACY.
CHEMISTRY	

Modes of Examination

The Examinations in these subjects shall be written and oral, and in Anatomy, Chemistry, Botany, and Materia Medica, by practical tests in addition.

Passed Candidates to be arranged in Two Classes

The days and hours of the Examinations shall be publicly notified at least one fortnight before they are held. At the end of one week from the day of the last Examination, the Examiners shall ar-

* See Appendix.

range in two divisions, each in alphabetical order, such of the Candidates as have passed; and a Pass Certificate, signed by the Registrar, shall be delivered to each Candidate.

Such Candidates only, as in the opinion of the Examiners are admissible to Examination for Honors, shall be placed in the First Division.

EXAMINATION FOR HONORS.

Subjects for Honor Examination.

Any Candidate who has been placed in the First Division at the FIRST EXAMINATION may be examined for Honors in any or all of the following subjects :—

ANATOMY AND PHYSIOLOGY.

Candidates may illustrate their answers by sketching the parts they describe.

CHEMISTRY.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

STRUCTURAL AND PHYSIOLOGICAL BOTANY.

Time and mode of Examination

The Examinations shall take place in the week following the promulgation of the result of the FIRST EXAMINATION. They shall be conducted by means of printed papers and practical tests.

The Examinations shall be conducted in such order, and at such hours, as shall be fixed by the Registrar of the University, due notice of the same being given.

Proficiency at Pass Examination to be regarded

In determining the relative position of Candidates, the Examiners shall have regard to the proficiency evinced by the Candidates in the same subjects at the Pass Examination.

Scholarship.

If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most in Anatomy and Physiology, the Candidate who shall distinguish himself the most in Chemistry, and the Candidate who shall distinguish himself the most in Materia Medica and Pharmaceutical Chemistry, shall each receive a Scholarship of Sixteen Rupees a month for the next two years.

No single Candidate shall hold more than one Scholarship at the same time.

Prizes.

Under the same circumstances, the First and Second Candidates in each of the preceding subjects shall each receive a Microscope of the value of One hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Structural and Physiological Botany shall receive a similar Prize.

SECOND EXAMINATION.

Qualifications required of Candidates for Second Examination.

The SECOND EXAMINATION shall take place once a year, and commence in the third week of March.

No Candidate shall be admitted to this Examination within Two Years of the time of his passing the FIRST EXAMINATION, nor unless he have produced Certificates to the following effect :—

1. Of having passed the FIRST EXAMINATION.

2. Of having subsequently to having passed the FIRST EXAMINATION attended Lectures on

GENERAL ANATOMY AND PHYSIOLOGY	*One Course.*
MEDICINE, (*including* HYGIENE) AND GENERAL PATHOLOGY*	*Two Courses.*
SURGERY, (*including* DISEASES OF THE EYE)* ...	*Two Courses.*
MIDWIFERY	*One Course.*
MEDICAL JURISPRUDENCE	*One Course.*

3. Of having subsequently to having passed the FIRST EXAMINATION, dissected during One Winter Term, and of having performed operations on the dead subject during the other—the Certificate of the latter to specify the number and nature of the operations so performed.

4. Of having conducted at least Four Labours.

Certificates on this subject will be received from any legally-qualified Practitioner in Medicine.

5. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during Twelve Months, and Lectures on Clinical Surgery.

6. Of having attended the Medical Practice of a recognised Hospital or Hospitals during other Twelve Months, and Lectures on Clinical Medicine.

7. Of having attended the practice of an Eye Infirmary during Two Months.

The Candidate shall also produce a certificate of general character and conduct from a Teacher as far as the Teacher's opportunity of knowledge has extended.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

Subjects of Examination.

Candidates shall be examined in the following subjects :—

PHYSIOLOGY.

The papers in Physiology shall include questions in Comparative Anatomy.

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, HYGIENE.
SURGERY.
MEDICINE.
MIDWIFERY.
FORENSIC MEDICINE.

* This should, if possible, be given as separate Courses.

Modes of Examination

The Examinations shall be written, oral, and practical.

The Examinations shall be conducted on days and at hours to be notified at least one fortnight before their commencement

The practical (clinical) Examination in Medicine and Surgery shall be conducted in the wards of a Hospital, by the Examiners of those branches.

In Medicine and Surgery, each Candidate shall be required to examine, diagnose, and treat six cases of Acute or Chronic Disease, to be selected by the Examiners ; to draw up careful histories of these cases, and to perform and report in detail necroscopical examinations, should any of the selected cases end fatally. Should none so terminate, the *post-mortem* examination of any other cases that may have died in Hospital shall be performed and reported by the Candidates.

The Candidates shall, in addition, perform such of the minor operations of Surgery as may be required in the Out-door Dispensary of the Hospital at the time of the Examination, and as the Examiners may select

They shall also each perform three capital operations upon the dead subject, after detailing to the Examiners the pathological conditions in which such operations are necessary, the different modes of operation adopted, and their reasons for preferring any particular mode of procedure.

They shall also apply apparatus for great surgical injuries, and explain the object to be attained by them, as well as the best manner of effecting that object.

They shall also, in the Medical Wards, examine morbid products chemically, and by the aid of the Microscope, in the presence of the Examiners, demonstrating the results obtained.

Passed Candidates to be arranged in two classes.

On Monday, in the week following the conclusion of the Clinical Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate.

Such Candidates only, as in the opinion of the Examiners are admissible to the Examination for Honors, shall be placed in the First Division

Examination for Honors.

Subjects for Honor Examination

Any Candidate who has been placed in the First Division at the Second Examination may be examined for Honors in any or all of the following subjects :—

Physiology and Comparative Anatomy

Candidates may illustrate their answers by sketching the parts they describe

Surgery.

Medicine

Midwifery.

Medical Jurisprudence.

Time and mode of Examination.

The Examinations shall take place in the week following the completion of the SECOND EXAMINATION. They shall be conducted by means of printed papers and practical tests, and the Examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the Candidates, when they appear to require explanation

The Examinations shall be conducted in such order as will be made known annually by the Registrar of the University.

Proficiency at Pass Examination to be regarded.

In determining the relative position of Candidates, the Examiners shall have regard to the proficiency evinced by the Candidates in the same subjects at the Pass Examination.

Candidates to be arranged according to proficiency.

Candidates who pass the Examination, and acquit themselves to the satisfaction of the Examiners, shall be arranged according to the several subjects and according to their proficiency in each; and Candidates shall be bracketed together, unless the Examiners are of opinion that there is a clear difference between them.

Scholarships.

If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most in Physiology and Comparative Anatomy, the Candidate who shall distinguish himself the most in Surgery, and the Candidate who shall distinguish himself the most in Medicine, shall each receive an Exhibition of Forty Rupees per mensem for the next Two Years, with the style of UNIVERSITY MEDICAL SCHOLAR. Only one such Scholarship shall be tenable by the same Candidate.

Prizes.

Under the same circumstances, the First and Second Candidates in Physiology and Medicine shall each receive a Microscope of the value of One Hundred Rupees In the event of the successful Candidate having obtained a prize Microscope at the First Honor Examination, he shall obtain a prize of Books of the same value.

The first Candidate in Surgery shall receive a prize of Surgical Instruments of the value of One Hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Midwifery shall receive a case of Midwifery Instruments, and the Candidate who shall stand first in Medical Jurisprudence, shall receive a Toxicological Cabinet of the value of One Hundred Rupees.

DOCTOR OF MEDICINE.

The Examination for the Degree of Doctor of Medicine shall take place once a year, and commence on the first Monday in December.

Certificates required from Candidates for Doctor's Degree.

No Candidate shall be admitted to this Examination, unless he have produced Certificates to the following effect:—

1. Of having taken the Degree of Bachelor of Medicine in this University, or a Degree in Medicine or in Surgery at a University, the Degrees granted by which are recognised by the Senate of this University.

Those Candidates who have not taken the Degree in this University shall produce a Certificate of having completed their Twenty-third year.

2. Of having attended, subsequently to having taken one of the above Degrees—

a. To Clinical or Practical Medicine during Two Years in a Hospital or Medical Institution recognised by this University.

b. Or, to Clinical or Practical Medicine during One Year in a Hospital or Medical Institution recognised by this University, and of having been engaged during Three Years in the Practice of his Profession.

c. Or, if he have taken the Degree of Bachelor of Medicine in this University, of having been engaged during Four Years in the Practice of his Profession.

One Year of attendance on Clinical or Practical Medicine, or Two Years of Practice, will be dispensed with in the case of those Candidates who, at the SECOND EXAMINATION, for the Degree of Graduate, have been placed in the First Division, or who have obtained the Degree of B. A. previous to beginning the Study of Medicine.

3. Of Moral Character, signed by two persons of respectability.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

Mode of Examination.

The Examinations shall be conducted by means of printed papers and *vivâ voce* interrogation.

Subjects of Examination.

Candidates shall be examined in the following subjects:—

ELEMENTS OF INTELLECTUAL PHILOSOPHY, MORAL PHILOSOPHY, AND ENGLISH COMPOSITION.

MEDICINE, *including* PRACTICE OF PHYSIC, SURGERY, AND MIDWIFERY.

Exception in favor of B. A.'s.

The Examination in Mental and Moral Philosophy, and English Composition, shall be dispensed with in the case of all Candidates who have obtained the B. A. Degree in any recognised University.

The Examinations shall be conducted in such order as will be communicated annually by the Registrar of the University.

Passed Candidates to be arranged in two classes.

On Monday morning, in the following week, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate, under the Seal of the University and signed by the Chancellor, shall be delivered to each Candidate.

REGULATIONS RELATING TO STUDENTS WHO COMPLETED THEIR MEDICAL STUDIES IN OR BEFORE MARCH 1856.

Special Rules for present and past students.

Candidates who completed their Medical Studies in or before March 1856 shall be allowed to present themselves for the Degree of Bachelor (or Graduate) and Doctor of Medicine, upon producing the Certificates and other documents specified in the foregoing Regulations.

The first Pass or Junior Diploma Certificate of all Students of the Calcutta Medical College, who have obtained that Certificate prior to the promulgation of these Regulations, shall be accepted as equivalent to the First Examination Certificate of this University.

Graduates of the Medical College, who may wish to obtain the Degree of Doctor in Medicine, shall produce the Diploma of Graduate of Medicine of the Medical College of Calcutta, and afford proofs of having been engaged for Five Years in the practice of their profession.

The Examinations shall be the same as those specified in the Regulations hereinbefore contained.

APPENDIX.

Syllabus referred to, supra.—The questions in Botany at the Pass Examination, for the Degree of Bachelor of Medicine, will be limited to a selection from the matters referred to in the following Syllabus:—

1*st.* Definitions and explanations of the following terms

Achenium.
Achlamydous.
Acotyledonus.
Æstivatio.
Albumen.
Alburnum.
Amentum.
Amphitropus.
Anatropus.
Antiropus.
Apocarpus.
Arillus.
Axilla.
Bractea.
Bulbus.
Capitulum.
Capsula.
Carpella.
Caryopsis.
Caudex.
Circinatus.
Cirrus.
Coccus.
Commissura.
Connectivum.
Cormus.
Corymbus
Cotyledon.
Cremocarpium.
Cuticula.
Cyma.
Dehiscentia.
Diadelphus.
Dichotomus.
Dicotyledonus.
Didynamus.
Digitatus.
Discus.
Dissepimentum.
Distichus.
Drupa.
Ductus.
Duramen.
Embryo.
Endocarpium.
Endogenus.
Epicarpium.
Epidermis.
Epigynus.
Equitans.
Etiolatus.
Exogenus.
Folliculus.
Foramen.
Frons.
Funiculus.
Fusiformis.
Gemma.
Germen.
Glans.
Gluma.
Hilum.
Hypogynus.
Imbricatus.
Indehiscens.
Inferior.
Involucrum.
Jugum.
Labiatus.
Latex.
Legumen.
Lenticella.
Liber.
Ligula.
Limbus.
Loculicidus.
Lodicula.
Lomentaceus.
Medulla.
Monadelphus.
Monochlamydeus.
Monocotyledonus
Mucronatus.
Nectarium.
Nucleus.
Orthotropu
Palea.

Panicula.	Racemus.	Syncarpus.
Papilionaceus	Rachis.	Syngenesia.
Papus	Radicula.	Tegmen.
Parenchyma.	Radix.	Testa.
Parietalis.	Raphe.	Tetradynamus.
Pedicellus	Raphides.	Thyrsus.
Pedunculus	Receptaculum.	Torus.
Peltatus.	Rhizoma.	Truncatus.
Pepo.	Ringens.	Tuber.
Perianthium.	Samara.	Turio
Pericarpium	Septicidalis	Umbella.
Perigonium.	Siliqua.	Umbilicus.
Perigynus	Silicula.	Unguis.
Perispermum.	Spadix.	Utriculus.
Petiolus.	Spatha.	Vagina.
Phyllodium	Spermodermis.	Valva.
Placenta.	Spica.	Valvatus.
Plumosus	Spongiola.	Vascularis.
Plumula	Stipitatus.	Vena.
Pollen.	Stoma.	Vernatio.
Polyadelphus.	Strobilus.	Verticillatus.
Pomum.	Superior.	Vitta.
Pyxidium.	Sutura.	

2nd. Descriptions of Plants (according to the Scheme specified below) selected from some of the following Natural Orders —

Ranunculaceæ, Papaveraceæ, Fumariaceæ, Cruciferæ, Resedaceæ, Violaceæ, Polygalaceæ, Caryophyllaceæ, Malvaceæ, Hypericineæ, Geraniaceæ, Lineæ, Leguminosæ, Rosaceæ, Crassulaceæ, Umbelliferæ, Caprifoliaceæ, Compositæ, Campanulaceæ, Ericineæ, Gentianaceæ, Convolvulaceæ, Boraginaceæ, Solanaceæ, Scrophulariaceæ, Labiatæ, Primulaceæ, Euphorbiaceæ, Orchidaceæ, Irideæ, Amaryllideæ, Liliceæ, Aroideæ, Cyperaceæ, Gramineæ

The scheme for describing the Plants.

(a) STEM.	General Character.
(b) LEAVES.	Arrangement.
(c) ———.	Stipulation.
(d) ———.	Composition.
(e) ———.	Form.
(f) ———.	Margin and Incision.
(g) ———.	Venation.
(h) ———.	INFLORESCENCE. General Character.
(i) ———.	Bracteal Appendages.
(j) FLOWER.	Peculiarities of Calyx.
(k) ———.	——— ——— Corolla.
(l) ———.	——— ——— Stomens (noticing insertion).
(m) ———.	Disk.
(n) ———.	Pistil (as to Ovary, Style, Stigma, Placentation)
(o) ———.	A brief sketch of the chief characteristics of the Order to which the Plant belongs.

N. B.—The Candidates for Honors at all Examinations in Botany shall be required—

1st To define any of the technical terms in the above list.

2nd. To describe Phanerogamous Plants according to the above Scheme, with the following additions in lieu of question *(o)*.

(o) FRUIT.	General Character.
(p) ———.	Dehiscence
(q) ———.	Placentation.
(r) ———.	Arrangement of Embryo in the Seed.
(s) ———.	Reasons for referring it to a particular Order to which it may belong or seem to approximate.
(t) ———.	The "Regions" and "Stations" usually affected by the species of that Order.

3rd. To answer questions on Botanical Physiology.

C.

CALCUTTA UNIVERSITY

FIRST REPORT OF THE SUB-COMMITTEE OF LAW

THE Sub-Committee of Law, consisting originally of Sir James Colvile, Mr. Eliott, the Advocate General, Baboo P. C Tagore, and Baboo Ramapersaud Roy, and subsequently enlarged by the addition, first of Mr. Trevor and afterwards of Mr LeGeyt, have considered the matters referred to them, and submit the following Report:—

London University system must be modified to suit this country.

The Sub-Committee have been anxious, in accordance with the views expressed in paragraph 26 of the Hon'ble Court's Despatch of the 19th of July last, to take the London University as their model. But it is to be observed, that what is sought by the Examination prescribed by the Senate of the London University is simply a sufficient test of the Candidate's knowledge of general Jurisprudence and of the Municipal Law of England. It is obvious that such a system must be considerably modified to meet the peculiar circumstances of a country into which the Law of England has been only partially introduced; in which the two largest portions of the community are governed by the Hindoo or the Mahomedan Law, wholly in questions of inheritance and succession, and partially in questions of contract and personal rights; in which there exists a large body of written law limited in its operation to India, and not of universal obligation throughout India; and in which justice is administered by Courts having a different origin, and following different forms of procedure and courses of practice.

Modifications to affect instruction in Municipal Law rather than in Jurisprudence

The requisites for a Law Degree in the different Universities of India will probably vary somewhat according to the means of instruction provided in each Presidency. In this Presidency the Sub-Committee understand that provision will be made by Government for lectures on general Jurisprudence, the elements of the Roman Civil Law and International Law by one Professor, and for lectures on the Municipal or Positive Law of the country by another Professor.

The instruction given by the first, to whatever degree it may be carried, need not differ from instruction on the same subjects given in other countries. The modifications required by the circumstances already referred to will affect the lectures on Positive or Municipal Law, and the course of instruction by which the *practical*, as distinguished from the *speculative*, lawyer is mainly to be formed.

Whilst the Sub-Committee consider that it is inexpedient to make an acquaintance with those parts of the law of England, which are either not in force, or of rare and limited application in India, one of the conditions of a Degree, and thus to enforce or encourage a study that can be of little service to the Student in his after career; they nevertheless feel that it will be necessary to insist on a certain degree of practical and technical knowledge of the Law of England in many of its branches.

Some knowledge of English Law requisite.

For, *first*, it appears to the Sub-Committee to be essential, that the Law Student should have the opportunity of studying the scientific application of legal principles to the transactions of the world in which he lives. For that purpose he must have recourse to some living system. This he will most naturally seek in the law of England; and in seeking it there, he will do no more than the Judges of the Company's Courts, who constantly refer for legal principles to English or American authorities. He will certainly not find what he wants in the Hindoo or Mahomedan systems, whether studied in their ancient purity, or in those Commentaries by which each has been rather overlaid than elucidated.

Reasons for this recommendation.

Nor will he find it in the Roman Civil Law with all its scientific arrangement. For example, the Institutes will give him, with admirable precision, the definitions and the distinguishing characteristics of the different kinds of contract by which the dealings of men were carried on in the time of Justinian; and he will thence learn those general principles, which are the foundation of the Law of Contracts in all Codes. But the Institutes will not teach him, either in its actual development, or in its gradual growth during the last 150 years, that system of Mercantitle Law which, in most of its parts, is accepted by all civilized nations, and wholly regulates the commercial transactions of the two greatest trading communities that the world has ever seen—England and America.

Secondly,—It must be remembered that the Law Students will not look exclusively to the Mofussil as the scene of their future career. Many will look forward to becoming Pleaders in the Small Cause Courts, or to practising in one capacity or another in the Supreme Courts, or such other Superior Courts as shall hereafter exercise original jurisdiction in the Presidency Towns.

The first question of detail to which the Sub-Committee directed its attention, was that which relates to the conditions on which a Candidate for a Degree in Law shall be allowed to present himself for Examination.

Conditions of Examination for Degree.

They propose under this head—

First,—To adopt the rule of the London University, and to admit any Candidate to Examination, after the expiration of one academical year from the time of his obtaining a Degree in Arts in one of the Indian or European Universities.

Candidates must either have taken a Degree in Arts one year previously;

Secondly,—To afford to Students the means of graduating in Law without graduating in Arts, and for that purpose to admit any Candidate to Examination after the expiration of four years from the time of his passing the Entrance Examination in any Indian University.

Or must have passed Entrance Examination four years previously;

Thirdly,—They would give facilities to Students of a more advanced age, and propose that any Candidate, who is of the age of twenty one year and upwards, shall be admitted to the Examination for a Degree in Law *at any time after he has passed* the Entrance Examination in one of the Indian Universities.

Or, if twenty-one years of age, must have passed Entrance Examination any time previously.

Subjects of Examination.

The next question of detail considered by the Sub-Committee was that which concerns the *subjects* of the Examination.

The Sub Committee do not at present propose any particular books. They conceive that, even as regards the Examination in general Jurisprudence, it will be well to wait until the course of study in the Presidency College has assumed a more definite shape. This difficulty is still greater as regards Positive or Municipal Law. It is obviously impossible to prescribe, as is done in the London University, such a work as Stephen's Commentaries; both because it includes much that need not be taught, and because it does not include much which must be taught in any Indian School of Law. All therefore that the Sub-Committee feel competent at present to recommend is that for an ordinary Degree in Law there should be—

No particular books proposed.

First,—An Examination sufficient to test the Candidate's knowledge of the general principles of Jurisprudence, probably one paper will be sufficient for this purpose.

1. One paper in general Jurisprudence.

Secondly,—An Examination sufficient to test the Candidate's knowledge of the several systems of Municipal Law which obtain in this country; *first,* as it concerns personal rights and status, including herein the law of adoption amongst Hindoos; *secondly,* as it concerns property, including, of course, the general nature and the various kinds of property, the different modes of acquiring it, and herein the law of contracts and the law of succession, whether testamentary or *abintestato* (the two latter branches to be treated with special reference to the Hindoo and Mahomedan law;) *thirdly,* as it concerns the sanction of rights, or the remedies for wrongs, and herein the general principles of procedure, the law of evidence, and the criminal law.

2. Three papers in Municipal Law.

One paper on each of these sub-divisions should be set, and the successful Candidates may, like those who pass in Arts, be divided into two classes.

Successful Candidates to be divided into two classes.

The Sub-Committee would also propose, that at a convenient interval, after the result of the general Examination is declared, there should be an Examination for Honors, in which separate papers should be set on the following subjects:—

Examination for Honors.

First,—On the Law as administered by the Courts of the East India Company, including Hindoo and Mahomedan law, and the law of immoveable property in the Mofussil.

1. Law of East India Company's Courts.

Secondly,—On the Law as administered by the Supreme Courts, including those parts of the Hindoo and Mahomedan law there administered and the English law of real property.

2 Law of Supreme Courts

Thirdly,—On Mercantile Law.

3 Mercantile Law.

Fourthly,—On Roman' Civil Law, International Law, and the conflict of Laws.

4. Roman Civil Law, International Law, and Conflict of Laws.

The Sub-Committee propose this division, because though, strictly speaking, Mercantile Law is included under the second head, yet the great importance of the subject entitles it to a separate place; and it is desirable to give those who may not care to be examined generally in the law administered by the Crown Courts, an opportunity of being examined in Mercantile Law. The Examination for Honors should be so arranged as to allow each Candidate an opportunity of being examined at his choice in two or more of those subject. Those entitled to honors should be arranged in three classes and in order of merit.

Mercantile Law why a separate subject

Candidates to be examined in two or more subjects.

Successful Candidates to be arranged in three classes.

The Sub-Committee are of opinion, that there should be but one Degree; that it should be entitled B. L. L., if the English designations are to be generally adopted in the Indian Universities, and Graduate of Law if those designations are not to be adopted. The Sub-Committee is generally in favour of adopting the English titles of Degrees. If Diplomas are given, the Diploma should, if the Graduate has taken honors, specify the class which he attained. If Diplomas ars not given, the honors gained by Candidates for honors should be duly recorded in some other way.

Degree to be entitled B L L.

Class of Degree and of Honors taken to be recorded.

D.

FIRST REPORT OF THE SUB-COMMITTEE OF CIVIL ENGINEERING

THE Sub-Committee of Civil Engineering consisted originally of Colonel Goodwyn, Messrs. Ricketts, Malet and Allen ; subsequently Colonel Baker was added, while Messrs. Ricketts and Malet went away from Calcutta, leaving Colonel Goodwyn, Mr. Allen and Colonel Baker, who submit the following Report :—

Degrees in Civil Engineering to be given by Calcutta University.

The London University does not give Degrees in Civil Engineering, but the Sub-Committee is of opinion that Degrees may advantageously be given by the Calcutta University in that Faculty, as recommended in the 31st para. of the Despatch of the Court of Directors.

Present proposals have reference to Engineering Colleges in N. W. Provinces, and Calcutta.

In proposing the Regulations under which Degrees shall be given in Civil Engineering, the Sub-Committee has had regard to the constitution and objects of the Civil Engineering College already existing in the N. W. Provinces, and of the one about to be organized in Calcutta.

These Colleges not to be superseded by University.

The object of these Institutions is to train up men for public and private employment in all grades and in every branch of Civil Engineering, Architecture, Surveying, and Building. It is not supposed that in the fulfilment of these ends, the Colleges will be superseded by the University, or, that a Degree in Civil Engineering will be made an indispensable qualification even for the higher grades of the Department of Public Works.

But University Degree to be evidence of higher attainments.

The College Diploma will still be held as sufficient evidence of ordinary attainments and ordinary competence, while the University Degree of Graduate or Bachelor of Civil Engineering will attest the possession of far higher professional attainments, of general scientific knowledge, and of the fruits of intellectual cultivation

B. A Degree to be a necessary qualification for Degree in Civil Engineering.

Keeping in view these considerations, the Sub-Committee would follow the rules of the London University as regards the conditions under which Candidates are admitted for a Degree in Laws, rather than that recommended by the Sub-Committee of Law, and would not dispense with a Degree of B. A. as a preliminary qualification for that of Bachelor of Civil Engineering. It would, however, adopt the Rules regarding "Honors" in Civil Engineering and the classification of the successful Candidates proposed by the Sub-Committees of Arts and Law.

Rules as to "Honors" to be those recommended by Sub-Committees of Arts and Law.

In the Draft Report of the Sub-Committee of Arts, it is provided that no Candidate shall be admitted to Examination for the Degree of B. A. "within four academical years of the time of his passing the Entrance Examination," and "unless he produce satisfactory testimonials of moral character, and of having prosecuted for not less than four years after passing the Entrance Examination, a course of study in those branches of knowledge in which he is to be examined." Should the system of affiliation be adopted, it is assumed that both the Colleges of Civil Engineering will be affiliated to the Calcutta University, but as the course of study in the Civil Engineering Colleges may probably not exceed two years, the Sub-Committee would recommend that such of their alumni as shall be Candidates for a Degree in Arts may be allowed to spend the remaining two years in the practice of Civil Engineering, and in private study of those branches of knowledge required for the Degree of B. A. Without this concession, it is feared that the practical part of the Candidate's professional education would be sacrificed to the theoretical, or that the temptation of immediate remunerative employment would prevent many from extending their studies into the higher paths of science.

Pupils of C. E. Colleges to be allowed to go up for B. A. Degree after two years' study at C. E College and two years spent in practical Engineering and private study.

With these explanatory remarks, the Sub-Committee of Civil Engineering submit the following proposals :—

Bachelor of Civil Engineering.

Examination for Degree of B. C. E. to be annual.

The Examination for the Degree of Bachelor of Civil Engineering shall take place annually during the month of

No Candidates shall be admitted to Examination for the Degree of B. C. E., until after the expiration of one academical year from the time of his obtaining the Degree of B. A. in the Calcutta University, or in one other of the Indian or European Universities.

Candidates must have obtained B A Degree at least one year previously

Fees to be levied as in other Faculties.

Fees, according to the scale that may be decided upon for the other Faculties.

Subjects of Examination.

The Examination shall be conducted entirely by means of printed papers. It shall be sufficient to test the Candidate's knowledge of—

MATHEMATICS, ... Spherical Trigonometry, as applied to Geodesy, Composition, and Resolution of Forces.
Equilibrium of Arches, as applied to mechanics, friction, elasticity, forms of fixed and locomotive engines.
Strength and stress of material.

NATURAL PHILOSOPHY,
- Steam, its powers, properties, and various applications.
- Fuel, of various kinds, estimation of calorific power.
- Electricity and the various appliances for making it economically useful.
- Meteorology, Physical Geography, } Especially of India.
- Chemistry, as applicable to cements, conditions and effects of fermentation, causes of decay, and preservatory processes.
- Geology, Mineralogy, } The nature of soils and earths, the selection of building and road materials.
- Botany, vegetable products, timber fibres, *oils*.
- Theory of Rivers—irrigation, drainage, silt, growth of deltas, warping of lakes, water power tides, navigation of estuaries, harbour-works, groins, sea beaches.

ARCHITECTURE, ...	Elements of harmony, proportion, and expression. The classic orders and their parts—their application. Principles of composition. Intercolumniation. Arcades and arches. Combination and arrangement. Interiors and sub-division. *Styles.* Egyptian. Grecian. Roman or Italian. Saracenic. Pointed—3 periods. Castellated.
PRACTICAL SCIENCE, ..	Drawing in all its branches, mechanical, perspective, and isometrical. Hydrography. Mechanism and mill-work. Animal power. Various mechanical arts, *viz.* carpentry, building, smith-work, iron-founding, and forging. Preparation of material. Brick-making. Lime-burning. Pottery. Modelling. Timber-cutting. Artificial foundations.

For reasons similar to those adduced by the Sub-Committee of Law, this Sub-Committee refrain for the present from proposing any particular books.

HONORS.

Examination for Honors to test higher attainments in any of the same subjects.

The Examination for Honors, to be held one month after the general Examination, will test a higher degree of attainments in any of the branches of Science above enumerated at the option of the Candidates. "Those entitled to Honors should be arranged in three classes and in order of merit."

Diploma of B. C. E to contain mention of any Honors taken.

There should be but one Degree, that of B. C. E. (provided the term "Bachelor" be adopted in the other Faculties.) This Diploma or Certificate should specify the class of Honors, if honors have been taken.

C. ALLEN.
H. GOODWYN, *Lt.-Col., Engineers.*
W. E. BAKER, *Lt.-Col. Engineers.*

CALCUTTA,
The 22nd June 1855.

E.

REPLIES FROM THE LOCAL GOVERNMENT.

No 1908 A. OF 1855

FROM

WILLIAM MUIR, ESQUIRE,
Secretary to the Government of the North-Western Provinces,

TO

W. G. YOUNG, ESQUIRE,
Secretary to the Indian University Committee,
Fort William.

Dated Head Quarters, Nynee Tal,
The 22nd September 1855.

GENERAL DEPARTMENT.

SIR,

I AM directed to acknowledge the receipt of your letter, dated the 10th July last, forwarding, for the consideration and opinion of the Lieutenant-Governor, printed papers relative to the establishment of the Calcutta University, and in reply to communicate the following views and remarks for the information of your Committee.

2. The Lieutenant-Governor has attentively considered the various details connected with this important subject, in communication with the Director of Public Instruction, copies of two Reports from whom, No. 760, dated 7th August, to end of para. 24, and No. 1020, dated 10th September, with enclosure, are herewith forwarded.

3. At the same time, the Lieutenant-Governor greatly doubts whether, for some considerable period to come, the students of the Anglo-Vernacular Institutions under this Government will possess the exact and critical knowledge, and the accurate and copious use, of the English language, which, as is hoped, will, in a due gradation, be strictly insisted upon in conducting the Examinations in that language and literature for all the proposed standards.

4. It is believed that, in other branches of study, such as Mathematics, History, Geography, and ultimately Natural Philosophy, and both the Physical and the Moral Sciences, the students from these Provinces will be found to have acquired a very fair amount of solid and useful information. But the Lieutenant-Governor has deeply regretted to find that their knowledge of the English language is generally very defective, and their instruction in it, especially in the lowest classes, has not been as close and carefully correct as is indispensably requisite for giving a thorough command over any foreign tongue. The inferiority of the Teachers of the junior classes, and the difficulty in this part of the country of supplying their places by more qualified persons, are the great causes of this serious deficiency.

5. The Lieutenant-Governor, in concert with the Director, is using his utmost efforts to secure the introduction of a general and effective reform in the above respect, but the

work will be one probably of much time, and the view which he has now to take of the provisions of the Rules for University grades and honors is one rather resting upon general considerations and principles, than on a sense of the value of their being as yet accessible to the scholars from any of the Institutions in the North-Western Provinces.

6. Taking the Rules as they have been received with your letter *seriatim*, the Lieutenant-Governor would decidedly prefer the retention of the well-known distinctions of Bachelor and Master of Arts, in the Degrees to be given by the Indian Universities to any attempted substitutes.

7. On the subject of an Entrance Examination, the Lieutenant-Governor does not see, on the one hand, that there is much importance in insisting upon it, so long as a candidate who presents himself for a Degree Examination produces a certificate from the Head of an Institution affiliated to the University, showing that the prescribed courses of study have been pursued for a sufficient length of time. On the other hand, it may be expected that few of the students of the affiliated Institutions, who may look to presenting themselves ultimately for an University Examination, would be unprepared, to declare such an intention beforehand, and, therefore, to pass a preliminary test as an earnest of their purpose, and of their having the amount of elementary knowledge which would fit them for pursuing the approved previous scheme of training. Again, there is not the same reason here for requiring an Entrance Examination as exists at home, where honors and exhibitions may at once be gained at the same time that the matriculation test is passed, and where it is, therefore, necessary to place at that stage some efficient check upon the number of candidates who may present themselves. But there is also, in opposition to this, the general advantage of inducing young scholars to be entered, from the commencement of their more advanced studies, on the most suitable and complete course which can be selected, and it may be hoped likewise, that the studies of persons intending, or likely to become candidates, may, under this inducement, be, in some sensible degree, prosecuted with a greater regularity and perseverance. On the whole, upon this point, the Lieutenant-Governor would record his concurrence in the practical proposal which has been adopted by the Committee.

8. On the subject, further, of the Entrance Examination, the Lieutenant-Governor, adhering to the age of sixteen as that of general admission, in preference to that of fourteen named by the Director of Public Instruction of these Provinces, would suggest that it be made a distinct part of the Rules, that a critical knowledge of all the English authors prescribed is to be required as a *sine quâ non* from the candidates. He would demand the same close and precise acquaintance from a Native student of English at this age which would be required at home from an English student in regard to ordinary Latin translation and composition. This point he feels can scarcely be too much dwelt upon, as perhaps, even in Bengal, a loose and superficial knowledge of English syntax and idiom is to be found among students who are allowed to pass into the College classes.

9. The attention of the Committee is requested to the remarks by the Director of Public Instruction, North-Western Provinces, in his letter of the 10th September, as to limiting the selection of the English authors. The difficulty of procuring in this country, at a cheap price, a certain and large supply of any English works for the use of Native students is, undoubtedly, a practical one, which calls for consideration and some special

provision in the direction of Education. This difficulty might however be met by the publication, at the public expense, of a considerable number of cheap copies for School use of all the selected authors.

10. The suggestion in para. 8 of Mr. Reid's letter of the 10th September, that a student may be admitted to the Entrance Examination at the age of fourteen years, as an exception, on a certificate that he has attended with credit an affiliated Institution for seven continuous years, has the support and recommendation of the Lieutenant-Governor.

11. On the subject of Examination in the Vernacular languages, and of leaving open an option to any student, Mahomedan or Hindoo, to take up, at the Entrance Examination, Oordoo, Hindee, or Persian at pleasure, the sentiments of the Lieutenant-Governor entirely and strongly correspond with those of Mr. Reid. Oordoo is, in truth, the established language of ordinary instruction, as well as of business, in the North-Western Districts. It is not a mere variety of Hindee, but a distinct composite language, in universal use alike by Mahomedans and Hindoos, and it is a very great advantage that this common and widely diffused medium of intercourse, among all classes of the population, exists in so advanced a form of speech throughout Upper India. Not to leave the Oordoo completely and prominently open to the selection of students from this part of the country in lieu of any other language would, in the opinion of the Lieutenant Governor, be a great injustice and mistake.

12. At the Entrance Examination, the Lieutenant-Governor would not require, if either the Sanscrit or Arabic languages be taken up by a candidate, more than an elementary knowledge of their Grammar and Syntax, and the power of reading their easiest authors.

13. A Memorandum, marked *A* by Mr. Reid, contains his suggestions as to the test which may be best adopted in that language for all grades of the Examination.

14. The Lieutenant-Governor does not concur with Mr. Reid in his opinion in para. 11, that a B. A Degree should be given to a Native student unacquainted with English. He is happy to confirm Mr. Reid's remark, from his own observation of the progress made by students in the Institutions under this Government, that their acquirements in exact Science and Experimental Philosophy are of a range which would well entitle them to be received as competent to stand successfully for the B. A. Examination in those branches. But it is to be remembered that a B. A. Degree is to be given as the mark of a fair proficiency in *all* the parts of an improved and liberal education, such as will be a guarantee not merely of special knowledge, but of a comprehensive cultivation of all the faculties. No education of this kind could, in the opinion of the Lieutenant-Governor, be as yet given in India, without including, as an indispensable part of it, some advanced knowledge of the English language and literature.

15. In para. 17 of the Report of the Sub-Committee of Arts, it is proposed that "no one should be admitted to the Examination for the B. A. Degree, until he have prosecuted his studies "at any one of the affiliated Institutions for at least four years subsequent to Entrance;" and it is afterwards, in para. 28, explained, that this has been

determined upon in conformity with the view that the candidate for the B. A. Degree should be allowed, at the same Examination, to compete for the M. A. Degree, four years "being the period necessary, in the opinion of the Sub-Committee, for a student to go through a complete College course, and fit himself thoroughly for the Degree and Honor Examinations."

16. The Lieutenant-Governor would propose, in modification of this Rule, that candidates should be admitted, as in England, to compete for a B A. Degree after a period of two years from the date of entrance. It appears to him unreasonable and unfair, especially in a country where students are liable to be called early from collegiate instruction to seek for their maintenance by some mode of public or private employment, to deprive the candidate of the power of obtaining the B. A. Degree, until he has studied four years from the period of entrance, simply because that time is required to qualify him for competing also for Honors.

17. The tests for the B. A. Degree seem to the Lieutenant-Governor to be not on too high a standard. The tests in pure or abstract Mathematics might, indeed, in his opinion, be well made somewhat more difficult.

18. The Lieutenant-Governor would assign no honors in languages without such a knowledge of Arabic and Sanscrit as would imply a power of using them for the enrichment, and enlarged use, of the Vernacular tongues. This should be the test prescribed as indispensable for the M. A. Degree in that branch. But he would not raise the standard beyond this point, and he would admit a free and correct conversancy with the more difficult works and forms of composition in Persian, Oordoo, Bengalee, or Hindee, as equivalent to a more moderate amount of acquaintance with Arabic and Sanscrit.

19. The Lieutenant-Governor would however propose, that special Honors, with a distinctive mark, such as a Gold Medal, or some suitable title, should be granted for the highest proficiency and attainments in the Sanscrit and Arabic languages, on a scale greatly higher than the acquirements necessary for a M. A. Degree. This distinction should, in his view, be reserved for strictly optional competition.

20. The recommendations above offered in respect to the extent and manner in which a value should be attached to a knowledge of Arabic and Sanscrit are founded on the belief that the importance, for all general purposes, of a familiarity with these languages is wholly philological and lingual. The Lieutenant-Governor does not share in the opinion, that a wide public respect will not be paid to scholars who are seen to possess large stores of solid knowledge, unless this knowledge be accompanied also by a deep mastery over Arabic and Sanscrit He has no apprehension that, from the want of such special attainments, those who have really acquired an advanced proficiency in Literature, Science and Philosophy, will not be regarded with high estimation in India, in much the same measure as they would be elsewhere. If such a supposition should, which he much doubts, be true as to any part of the country, he is happy to think that a more liberal and practical tone of feeling may be confidently looked for among the bulk of the population in these Provinces. Here, indeed, excepting at Benares, there are, it should be said, scarcely any great schools of Sanscrit Literature

21. At the same time, the greatest degree of scholar-like familiarity with the structure and use of these two languages, and of acquaintance with all the resources of

their literature, is a valuable and honorable accomplishment, to which an appropriate distinction should undoubtedly be assigned at all Indian Universities. This distinction might readily be conferred without exacting this peculiar knowledge as an indispensable condition for every M. A. Degree.

22. The Lieutenant-Governor has only to add, that he agrees with the Sub-Committee of Engineering, that a B. A. Degree in Arts should not be dispensed with as a preliminary qualification for the Bachelor Degree in other branches. This Degree in Engineering or in Law will not be requisite for admission to public or private employments in those special professions; but it ought not, the Lieutenant-Governor thinks, to be conferred on any students who have not, in the words of the Sub-Committee of Engineering, given proof "of general scientific knowledge and of the fruits of intellectual cultivation."

I have the honor to be,
SIR,
Your most obedient Servant,
W. MUIR,
Secretary to Government, North-Western Provinces.

HEAD QUARTERS;
Nynee Tal,
The 22nd September 1855.

EXTRACT, PARAS. 1 TO 24, OF A LETTER FROM THE DIRECTOR OF PUBLIC INSTRUCTION, NORTH-WESTERN PROVINCES, DATED THE 7TH AUGUST 1855, NO. 760, TO THE SECRETARY TO THE GOVERNMENT OF THE NORTH-WESTERN PROVINCES.

PARA. 1. I HAVE the honor to submit, agreeably to the directions contained in your letter No. 1490 A of 1855, dated the 4th instant, the following remarks and suggestions on the Reports of the several Sub-Committees into which the Indian University Committee resolved itself, and especially on the Report of the Sub-Committee formed for the purpose of preparing Draft Rules for Examination for the grant of Degrees, and for other cognate matters, in the faculties of Arts—in reviewing which I shall confine myself to a consideration of the subject as connected with the present condition and the future prospects of English and scientific learning in these Provinces.

2. The advantages, and in fact the necessity, of a preliminary or *Entrance Examination*, appear to me to be too obvious to stand in need of any illustration and argument. A youth of sixteen or eighteen years of age ought to be able to pass creditably in the subjects laid down by the Sub-Committee of Arts.

3. With reference to the precocity of intellect displayed by the Natives, as compared to European youth, the minimum age at which a candidate shall be admitted to the Entrance Examination might be fixed, I think, at fourteen in place of sixteen years.

4 The acquirements in Mathematics and Natural Philosophy, and also in History and Geography, which the Sub-Committee require in the candidates for entrance, are quite within the reach of the Native student.

5. But the test of admission in *Languages*, as determined by the Sub-Committee, (and which indeed the Sub-Committee have found a subject of considerable difficulty,) is open to many objections, both in regard to the omission of much that should be insisted on, and the contemplated exaction of much that is incompatible with the condition of Oriental learning in the North-Western Provinces.

6. In the *first* place, the existence of Oordoo, as a language, separate and distinct from Hindee, is ignored. The Hindoo student is to pass in English and Sanscrit or English and Hindee, the Mahomedan student in English and Arabic or in English and Persian or Oordoo ("a variety of Hindee.") (Not in use)

Secondly, the inexpediency of any such Rule as the preceding, founded on the supposition (totally opposed to the facts,) that either Bengalee or Hindee is the Vernacular language of all Hindoos, will be at once admitted when I state, that out of 10,567 students reading in Persian and Koran Persian, &c. Schools in the Districts noted in the margin, 4,624 or 43·5 per cent. are Hindoos to 5,939 or 56·5 per cent. Mussulmans. It is true, that in the Hindee Schools of those eight Districts, we meet with 13,897 Hindoo scholars, but these are chiefly found among the agricultural population. The University will draw its students from our cities and large towns. To bring the subject to a still more satisfactory test, we will turn to the Government College returns, from which we learn, that at Bareilly every student in the English department, in which there are 195 Hindoos and only 30 Mahomedans, learns Oordoo. In the remaining Colleges, there are 686 Hindoos (who are also English scholars) reading Oordoo, and 204 studying Hindee. If the Benares College be excluded, in which Hindee and Bengalee are regarded as the Vernacular languages, "*par eminence*," we find in the three Colleges at Agra, Dehlee and Bareilly, 552 Hindoo students reading Oordoo, and 82 Hindee.

Agra
Allyghur.
Bareilly.
Etawah.
Furruckabad.
Mynpoory.
Muttra.
Shahjehanpore.

The significant [illegible] not [illegible] [illegible] [illegible] [illegible]

8. Under the circumstances detailed in the preceding paragraph, I would recommend, that in place of the last nine lines of the 14th para. of the Sub-Committee's Report (from "Ordinary" to "Burmese,") the following be adopted :—" Native, *i. e.* Hindoo and Mahomedan students shall pass in English and Bengalee, or in English, Bengalee and Sanscrit, or in English and Hindee, or in English, Hindee and Sanscrit, or in English and Oordoo, or in English, Oordoo and Persian, or in English, Oordoo and Arabic. A thorough acquaintance with one or other of the three Vernacular languages (Bengalee, Oordoo or Hindee) is indispensable."

9. The Entrance Examination in Sanscrit should, I think, be confined to the elements of Sanscrit Grammar, with the Hitopodesha as the test-book. The Sub-Committee, in discussing the propriety of insisting on a knowledge of Arabic and Sanscrit in the candidate for Honors at the B. A. Degree, regards those languages, chiefly with reference to their connection with the Vernacular dialects, Bengalee, Hindee and Oordoo. The Hon'ble Court (*see* the 32nd para. of their Educational Despatch) are of opinion, that "the Grammar of these languages, and their application to the improvement of the spoken lan-

guages of the country, are the points to which the attention of these professors, (*viz.* of the learned languages of India) should be directed." Similarly, at the Entrance Examination, the "Naphatul Yamun" should be the only test-book for Arabic, and an acquaintance with the elements of Arabic Etymology and Syntax be made a requisite qualification.

10. It cannot be denied, that more effective encouragement will be held out to the study of Arabic and Sanscrit by fixing an easy test, than if more extended acquirements were called for. These languages are to be studied, not so much with the intention of promoting the extension or even improvement of their existing literature, as to enrich, by their means, the spoken languages of Hindoostan.

11. The Sub-Committee of Arts, throughout their Report, assume that every student must be acquainted with English. This condition is taken for granted. But I find nothing in the Hon'ble Court's Despatch which warrants the exclusion of Native students who, although unacquainted with English, have attained high proficiency in both the literary and scientific departments of study, from the Honors which the University of India will hereafter bestow. I beg to refer His Honor to the 24th para. of the Despatch, in which the Court speak pointedly of "Academical Degrees" "as evidence of attainments in the different branches of Arts and Science." The several grounds on which the Court have determined on the establishment of an University in India, are the following:— "The rapid spread of a liberal education among the Natives of India, the high attainments shown by the Native candidates for Government Scholarships, and by Native students in private Institutions, the success of the Medical Colleges, and the requirements of an increasing European and Anglo-Indian population." Is a knowledge of English to be made an indispensable component part of a *liberal* education? I am aware that many, and even the majority, will argue that English must form part of a liberal Indian education. But it can hardly be affirmed that the Native student, who has acquired a thorough acquaintance with his mother tongue, who has mastered one or other of the classical languages of India, who has studied successfully the various branches of Natural and Mental Philosophy, and made himself acquainted with the past history of mankind, that this student can be rightly excluded from the ranks of those who have obtained a liberal education. Most gladly would I forward, by every means in my power, the spread of the English language, and if I thought that the conferment of Degrees on students unacquainted with English would in any measure *retard* the study of the English language, I would be the last to advocate any such system. But the exclusion of liberally educated Native students (such as I have attempted to sketch above) will narrow the University's sphere of usefulness, and is opposed to the general spirit of the Hon'ble Court's Despatch. I have before me the Oordoo Examination Papers of the Agra students on the subjects treated by the able Principal of the Agra College, in his lectures on Experimental Philosophy, which range as high as those laid down for a B. A. Degree. I earnestly solicit His Honor to use his utmost influence to bring the honorable distinction of a B. A. Degree within the reach of those deserving students, who have been precluded by circumstances over which they had no personal control, from the study of English in their youth, but who have attained the scientific standard fixed by the Committee, together with a thorough knowledge of their own and its cognate classical language.

12. In the opinions of the Sub-Committee, expressed in the 15th para. of their Report, I entirely concur: an Examination for Honors, on the admission of candidates, would be an anomaly.

13. The views which I have already expressed on the subject of the languages, a knowledge of which should be required in the candidate for admission, are equally applicable to the circumstances of candidates for a B. A. Degree.

14. For a simple Degree, the Native, *i. e.* Hindoo or Mahomedan student, should pass in English and Bengalee, or in English and Hindee, or in English and Oordoo. The candidate for Honors should take up English, Bengalee and Sanscrit, or English, Hindee and Sanscrit, or English, Oordoo, Persian and Arabic. The Sub-Committee, in the 22d para. of their Report, " strongly recommend that every candidate should be required to possess a critical knowledge of his own Vernacular language," and yet a few lines above, they state that " it is expected Mahomedan students will generally pass in English *and Persian or Oordoo.*" I note the discrepancy, because the Sub-Committee do not expressly recognize Oordoo as a Vernacular language, while it will in fact be *the* Vernacular language of seven-eighths of the students who will enter the University from these Provinces.

15. The reasons which the Sub-Committee adduce in support of their views on the expediency of calling for a critical knowledge of Arabic or Sanscrit in every candidate for Honors command assent. I would only add, that among both the Arabic and Sanscrit test-books, selected standard grammatical works should have a place. The late publication of a large edition of the *Mahabhashya*, which has lately been printed at Mirzapoor, under the supervision of Dr. Ballantyne, brings that valuable work within the reach of the Sanscrit student. Of the six Sanscrit works named by the Sub-Committee, one only is well known in these Provinces.

16. I should have noted, in an earlier place, the propriety of excluding " Yusof-o-Zulaikha " from the list of Persian books selected for the admission test.

17. I venture to suggest, that neither in Bengalee, nor in Hindee, nor in Oordoo, should there be any particular test-books. A certain portion of the written English answers might be given also in the student's Vernacular language, or his critical knowledge of both English and the Vernacular, tested by a sufficiently difficult translation from English into the Vernacular, and *vice versâ ;* and by a tolerably severe Examination in Bengalee, Hindee, or Oordoo Grammar. In short, the Vernacular should be treated as English is by the Senate of the London University. In the Regulations governing the Matriculation Examination, while particular works of standard Greek and Latin authors are selected, the following is all we find laid down in regard to the English language:— " The grammatical structure of the language:" " Proficiency in composition, will be judged of by the style of answers generally."

18. The limits within which the Sub-Committee have circumscribed the range of acquirements in Mathematics, Natural and Moral Philosophy, and the Physical Sciences, appear to me to bring the acquisition of those subjects within the reach of our Native students, assisted, as they will be, by European Professors.

19. The greatest obstacle, however, to the success of those cadidates for a B. A. Degree, who will come up from the Colleges and Schools of the North-Western Provinces, will be found in their defective knowledge of English. Under the system which His

Honor has lately prescribed, by which a knowledge of subjects of general and scientific information is acquired through the medium of the Vernacular, the students will be enabled to acquire a very fair acquaintance with History, Geography, the Physical Sciences, Natural Philosophy, &c. &c.

20. But in the words of the General Report of Public Instruction in the North-Western Provinces, for 1843-44, " it must never be forgotten how much less encouragement there exists here for the study of English than is the case in the Lower Provinces and in the Presidencies of Madras and Bombay. There are here very few European residents, except the functionaries of Government. There is no wealthy body of European merchants transacting their business in the English language, and according to the English method There is no Supreme Court, where justice is administered in English, no English Bar or attorneys; no European sea-borne commerce, with its shipping and English sailors, and constant influx of foreign articles and commodities. Even in the Public Service, the posts are very few, in which the knowledge of the English language is necessary for a discharge of their functions. All European residents are sufficiently well acquainted with the Vernacular to be able to express themselves, and to stand in no need of interpreters. All public business, except correspondence between English Officers, is carried on in the Vernacular language. There are, therefore, few means of diffusing a general taste for learning English in these Provinces, or of securing a sufficient reward to those who have exerted themselves to acquire it."

21. The candidates from the Upper Provinces will, it is evident, labor under great disadvantages, compared to those in Bengal. For some years to come, it may be necessary to fix the standard at a point below that which is eventually contemplated. Unless this is done, the advantages resulting from the establishment of the University of India are for a time lost to these Provinces.

22. It will be long ere the Native scholars of the North-West can compete for Honors, and thus entitle themselves to an M. A Degree. Any discussion of the Rules laid down by the Sub-Committee of Arts, in regard to the Examination for Honors and the M. A Degree, under these circumstances, is premature.

23. I do not feel myself competent to review the Report of the Sub-Committee of Medicine and of Civil Engineering. In the latter, we are assured by the Sub-Committee, that due regard has been paid to the constitution and objects of the Civil Engineering College at Roorkee.

24 The Report of the Sub-Committee of Law is drawn up evidently after a careful consideration of the state of the science and its requirements in India. In these Provinces, the regular and systematic study of Law in any form is unknown His Honor has expressed his intention of establishing Law Classes in the Government Educational Institutions. I would recommend that the course of legal study be framed with due regard to that ultimately fixed by the Senate of the University

(COPIES.)

No. 1020 OF 1855-56.

FROM

H. S. REID, ESQUIRE,

Director of Public Instruction,

North-Western Provinces,

To

WILLIAM MUIR, ESQUIRE,

Secretary to Government, North-Western Provinces.

Dated Head Quarters, Nynee Tal,

The 10th September 1855.

SIR,

WITH my letter No 1005 of 1855-56, dated the 7th instant, I had the honor to lay before the Hon'ble the Lieutenant-Governor a scheme of study for the English departments, School and Collegiate, of the Educational Institutions maintained by Government in these Provinces.

2. I now beg to submit some remarks on that scheme, in connection with the *Entrance* and B. A. Degree Examinations at the Calcutta University, as proposed by the Sub-Committee of Arts.

3. His Honor the Lieutenant-Governor will observe, that the University tests in English and Oriental Literature will be frequently changed, the only restriction being that the subjects be selected from the works of authors who may be expressly named by the Senate of the University, or are already named by the Sub-Committee.

4. When our Colleges and Schools are affiliated to the University, the English Literature tests must be those which the Senate may select.

5. In a Memorandum which I append to this letter, I have proposed that the range of selection be narrowed, and that sufficient and timely notice be given of the adoption of a new test to enable the students to procure the books required. In some instances it might be desirable for Government to print a cheap edition of the works selected.

6. There is often great difficulty in procuring books in sufficient numbers.

7 The course of study which I propose, takes the scholar in seven years through the School department. Supposing him to enter the lowest class of the School at the age of six or seven, he may reach the lowest collegiate class at the age of thirteen or fourteen. One year in the College should enable him to pass with the greatest ease the Entrance Examination at the University. He will then be only fourteen or fifteen. It would be a hardship to make him wait or waste two more years before he could go up to the Examination. Some boys come to our Colleges and Schools at the age of five and six. It is a matter of some importance to induce them to come at as early an age as possible. The deferment of the Entrance Examination till the student is sixteen years old will directly discountenance early attendance.

8. I think that, even if fourteen years of age be considered too early to fix as a general rule, any student should be admitted to the Examination at that age who may present a certificate showing that he has attended an affiliated College or School for seven continuous years.

I have the honor to be, &c.,
(Signed) H. S. REID,
Director of Public Instruction, N. W. P.

Office of Director of Public Instruction,
N. W. Provinces;
Head Quarters, Nynee Tal,
The 10th September 1855.

MEMORANDUM ON THE REPORT OF THE SUB-COMMITTEE OF ARTS FOR THE CALCUTTA UNIVERSITY.

THE *subjects* in Prose and in Poetry, for the Entrance Examination in languages, will, according to the Rules proposed by the Sub-Committee of Arts, be selected *one year and a half previous* to the Examination from the following outlines (restricting my remarks to the English Examination):—Pope, Cowper, Scott, Campbell, Addison, Johnson, Goldsmith, Southey, DeFoe.

I venture to suggest that the selection be confined to—

Prose.—Goldsmith, Addison, Johnson.

Verse.—Goldsmith, Pope, Campbell, and Rogers.

And that the one subject in prose and in verse be selected three years before the Examination, that the Government may be enabled to procure a sufficient supply of books in time, too, to give the candidates two years for the careful and critical study of the test elected.

The Mathematical standard might be somewhat raised, *viz.*, to—

1. *Arithmetic*, the whole.
2. *Algebra*, up to Quadratic Equations.
3. *Geometry*, the first 4 and 6th Books of Euclid.
4. *Mechanics*, as in the scheme.

From the list of English authors, from whom a prose and a verse subject shall be selected for the B. A. Examination, I would exclude Young, Swift, and Southey.

It is true that the student would not be called upon to read more or less if there were fifty, or if there were three authors only, from whom a verse and a prose subject should be selected. But the wider the range of authors, the less encouragement is afforded to the scholars to take up other than the English works which he reads as his regular test-books at School or College, and the greater will be the difficulty of providing a sufficiently large supply of cheap and correct editions of the works selected.

It is this difficulty which leads me to venture on the suggestion previously noted, *viz.*, that the Senate intimate to the Directors of Public Instruction the selected tests three years before the Examination, in order that a sufficient number of copies of each work or subject be procured in time to be furnished to the students, so as to allow of their being taken up two years before the date of the Examination.

(Signed) H S. REID,
Director of Public Instruction, N. W. P.

MEMORANDUM *A*.

1. AGREEABLY to His Honor the Lieutenant-Governor's instructions, I submit a further Memorandum on the subject of the Hindee test-books which may be selected at the Entrance and B. A. Degree Examination before the Calcutta University.

2. In my letter No. 760, dated 7th August 1855, I omitted to name the work of any particular author as a test-book in Hindee, but it appeared to me that, as the Englishman's knowledge of English is tested by his written and spoken answers, so should the Hindoo's acquaintance with Hindee be judged, and that test-books in the *Vernacular* were hardly required.

3. I know of no works which I could recommend as test-books, excepting the Ramayun.

4. It would, as His Honor has suggested, be advisable to provide the opportunity of testing students in varieties of style. Mr. Hall, Superintendent of the Government School at Ajmere, whose acquaintance with Hindee Literature is extensive, might be requested to compile a volume of Selections, prose and verse, with this view.

5. A test-book should be widely known and readily procurable. It should also be pure in style and feeling, and sufficiently difficult to prove the student's critical knowledge of his mother-tongue. These requisites are found combined in no Hindee works with which I am acquainted, certainly not in the Prem Sagur and Rajneet, in which the two first requisites may exist. Hindee has been for long neglected, and has not received that attention and consequent polish which has for years past been bestowed on Bengalee. Our late publications in Hindee are sufficiently numerous, but they have been expressly compiled for the use of common Schools.

6. Under these circumstances, and adopting His Honor's proposition, that there should be separate Examinations for B. A and M. A. Degrees after two and four years respectively, I recommend the following course:—

Entrance Examination.

One Khand (or Book) of the seven Khands of the Ramayun.

B. A. Degree Examination.

Three Khands of the Ramayun.

M. A. Degree Examination.

The whole Ramayun, and the volume of Selections (prose and verse) to be compiled, as above suggested (in para. 4.)

(Signed) H. S. REID,
Director of Public Instruction, N. W. P.

Nynee Tal,
The 19th September 1855.

No. 1473.

To

WILLIAM GORDON YOUNG, ESQUIRE,
Secretary to the Indian University Committee,
Calcutta.

Fort Saint George, 19th November 1855.

PUBLIC DEPARTMENT.

SIR,

I AM directed to acknowledge the receipt of your letter of the 10th July last, forwarding, with other papers, the Reports of the Sub-Committees of the Indian University Committee, and requesting an expression of the views of this Government upon them.

2 These Reports have been referred to the Director of Public Instruction at this Presidency, and in transmitting copy of his letter* on the subject, I am instructed to state that the Right Hon'ble the Governor in Council quite agrees with the views therein expressed, with but one exception.

3. Mr. Arbuthnot, in para 14, suggests the omission of certain works from the list of Latin and Greek books specified for the Degree of Bachelor of Arts.

4. His Lordship in Council does not see the advisability of restricting the number of books which are to be employed in the Examinations more than is necessary, and some of those mentioned by Mr Arbuthnot are not of extraordinary difficulty, and are in general use. But it may be that Mr. Arbuthnot, when making this suggestion, had solely in view the system of Examination by papers only, which it is the intention to adopt in this country.

5. His Lordship in Council would here take the opportunity of recording his dissent from this system, when proposed, as in the present instance, as a general plan for National Education.

6. In the case of selection for particular professions, he can fully understand that, as special qualifications are required, so the Examinations should be confined to particular subjects, and Examination Papers may be prepared accordingly.

7. But when the general education of a whole nation is in question, it appears to him that the freest scope should be given to the independent action of individual minds, and His Lordship in Council is very strongly of opinion that that full and free scope, which he would desire to see permitted, cannot be obtained unless *vivâ voce* Examinations are introduced to some extent.

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* Dated 25th October 1855.

8. They need by no means interfere with trials by questions on paper, which are equally necessary, but they do not admit, to an equal degree, of the exercise of judgment and taste in the selection of authors, neither do they allow of the admission of extensive and varied course of reading.

I have the honor to be,
SIR,
Your most obedient Servant,
T PYCROFT,
Chief Secretary.

No. 47.

FROM

A J ARBUTHNOT, ESQUIRE,
Director of Public Instruction,

To

T. PYCROFT, ESQUIRE,
Chief Secretary to Government, Fort St. George.

Mangalore, 25th October 1855.

SIR,

I HAVE the honor to reply to the Extract from the Minutes of Consultation, under date the 3rd of August last, No. 1020, calling for my opinion on the Reports of the Sub-Committees of the Indian University Committee, and to submit the following observations for the consideration of the Right Honoa ble the Governor in Council.

2. I will advert in the first place to those more general questions connected with the University scheme, which are treated of in the Report of the Sub-Committee of Arts, *viz*, the expediency of adopting the nomenclature peculiar to the Universities of England ; of enforcing an Entrance Examination, and of requiring all candidates for Degrees to have belonged for a prescribed period to certain Institutions affiliated to the University.

3. On the grounds urged in the letter from this Government to the Government of India, under date the 27th March last, I would strongly advocate the adoption of the English nomenclature, and especially of the title of *Bachelor of Arts*, in preference to that of *Graduate*, which the Committee have suggested as the next best title for the first Degree in Arts.

4. I concur with the Sub-Committee, though on different grounds from those assigned by them, that in the present state of Education in India, it would not be expedient to dispense with an Examination previous to the final or Degree Examination. The reason which weighs with me in recommending a previous Examination has reference rather to the especial branches in which Degrees are to be conferred than to the more general branch of the University in connexion with which it has been recommended by the Sub-Committee of Arts. It seems very desirable, that a certain amount of proficiency in those branches of study which belong to a general, as distinguished from a professional, Education, should be exacted from all candidates for Degrees in the professional branches ;

and while it might defeat the object of the latter, if the attainment of the Degree of Bachelor of Arts were to be made a necessary preliminary to going up for the professional Degrees, the end in view would be sufficiently attained by the enforcement of a Previous Examination.

5. The necessity of some such guarantee for the preliminary education of candidates for the professional Degrees is fully recognized in the Reports of the Sub-Committees of Law, Medicine, and Civil Engineering, in one of which (that of the Sub-Committee of Civil Engineering) it is recommended that the possession of the Degree of B. A. should be a *sine quâ non* to admission to Examination for the professional Degree.

6 On these grounds, I think it is desirable that there should be a previous Examination in Arts, which all candidates for Degrees should be required to undergo, but I would defer it to a later period than that proposed by the Sub-Committee, and make it to correspond rather with the Previous Examinations at Oxford and Cambridge, dispensing with all test on entrance. It appears to me, that by this means the object proposed by the Sub-Committee will be attained, while by the enforcement of an Entrance Examination, many students who, after a few years' course of study, might attain a very respectable degree, would, it is probable, be hindered from entering the University.

7 As respects the question of affiliation, I am unable to appreciate the advantages which the Sub-Committee of Arts anticipate from the adoption of this part of the plan of the London University. It is urged "as a means of improving existing Institutions and of encouraging the establishment of others on an efficient footing," and it is expected that this object will be attained "by the encouragement thus held out to such Institutions to adopt in their curriculum of study the subjects in which candidates for Degrees are to be examined, and by the necessity imposed upon candidates for resorting to Colleges and Schools in which an improved course of study has been established." This object, I would submit, will be equally attained without the process of affiliation; for if the University Degrees possess that value which is attached to similar distinctions in Europe, all Schools and Colleges of a better order will be forced to adopt in their curriculum of study the subjects prescribed by the University, and only those Institutions will be resorted to by candidates for Degrees in which the subjects in question are efficiently taught. Practically, the mere establishment of the University Examinations and Degrees will fully meet the object for which the process of affiliation is proposed. On the other hand, if the plan of affiliation be determined on, it will be no easy matter to decide satisfactorily what Schools and Colleges are worthy of being affiliated and what are not. The decision will entail dissatisfaction and jealousies on the part of those rejected, and in some instances it will operate to the exclusion of candidates upon whom Degrees might be very properly conferred. The Sub-Committee apparently are alive to the necessity of making an exception in certain cases, for they propose that, in rare and special cases, "it should be competent to the Senates to admit to the Examination for the Degree of B. A. students who, though not belonging to an affiliated School, can satisfy the Senate that they have pursued a regular course of study, under qualified tuition, at least four years subsequent to entrance, and that they are of good moral character." I would suggest that the exceptional course above provided for should be made the rule, and that the process of affiliation should be entirely dispensed with.

8. I now proceed to consider the list of subjects laid down for the Entrance or Previous Examinations, and for the Degrees

9. It appears to me that the standard proposed by the Sub-Committee for the Entrance Examination is somewhat too high even for the previous Examination which I have suggested, but if it should be eventually decided that the Previous Examination shall take place at Entrance, I think it should be distinctly stated that the Examination will be confined to ascertaining that the candidate possesses a grammatical knowledge of the books named, and that no knowledge of the subject-matter will be required.

Entrance Examination.

10. I would omit Natural Philosophy and Natural History entirely from the Previous Examination, at whatever period it may be held, and confine the Mathematics to the subjects named by the Committee. If the Previous Examination isto take place at Entrance, I would omit the 3rd Book of Euclid.

11. For the books specified in History, I would substitute "the leading facts in the Histories of England and India," without reference to any particular works.

12. In regard to the standard proposed for the B. A. Degree, I am constrained to express my apprehension, that the range of subjects is far too wide. The Sub-Committee have laid down four distinct departments of study in which a competent knowledge is to be required. In this they have followed the plan of the London University, which has been proposed as their model by the Hon'ble Court. It appears to me, however, to be questionable whether it was the intention of the Court that the very extensive range of subjects comprised in the scheme of the London University should be adopted in the Indian Universities, for the enforcement of such a standard seems to be altogether opposed to the principle laid down in the 29th para. of their Despatch. I would suggest that it should be at the option of candidates to pass either in—

B. A. Degree Examination.

1. Languages,
2. Moral Philosophy,
3. Mathematics and the Elements of Natural Philosophy;

or in—

1. Languages,
2. Moral Philosophy, and
3. Logic.

And I would either reserve the Physical Sciences for the Honor Examination, or make it an entirely optional subject, in which candidates aspiring to a place in the first division of the B. A. Degree list should be at liberty to present themselves for Examination.

13 I am aware that, in proposing the omission of the Physical Sciences from the list of subjects essential to an University Degree, I am running counter to opinions which have of late years had considerable influence upon the views entertained by the public in regard to Education. It is argued that no man can be considered to have been properly educated, who has not some general knowledge of the more important discoveries in Physical Science. I do not for a moment venture to depreciate the value of such knowledge, but it appears to me that the argument in favor of including these subjects in an University course proceeds upon an erroneous assumption, that it is the duty of an University to provide for its students being informed in all useful branches of knowledge

—in fact, that Education consists in a large stock of useful information. In reply, I would submit that the true object of Education, in its general sense, is to enlarge and discipline and cultivate the mental faculties, rather than to fill the mind with a variety of useful information. The two objects I apprehend cannot be carried out simultaneously.

14. From the list of Latin and Greek books specified for the B. A. Degree, I would omit, under the head of Languages—Sophocles, Thucydides, Plato and Tacitus, reserving these works for the Honor Examination.

15. In regard to the History, I would suggest whether it would not be advisable to give out limited periods of History for special Examination, in preference to the very extensive periods embraced in the list prepared by the Sub-Committee. An accurate knowledge of a limited period of History acquired from various sources is far more useful, both as regards the cultivation of the mind and as regards those practical purposes for which the study of History is designed, than a superficial acquaintance with the leading facts of the Histories of very lengthened periods.

16. From the Natural Philosophy, I would omit Acoustics and Optics. The Sub-Committee do not state whether they intend the propositions in Mechanics, Hydrostatics, &c., to be proved mathematically, or whether they merely propose to require a popular knowledge of these subjects. The latter, I should think, would be sufficient.

17. A list of test-books in the four Vernacular languages of Southern India is appended to this letter. It is by no means satisfactory, although it has been prepared with the advice of some of the most competent Vernacular scholars in this Presidency. It will of course be subject to the revision of the Senate from time to time, as the resources of these languages are improved.

Examination for Honors—Languages.

18. The Examination of candidates for Honors in languages should, I think, include questions on the style of various epochs, as well as historical questions suggested by the books named, and an essay. I would add Clarendon to the English authors.

19. Considerable importance, I think, should be attached in the Examination for Honors, as well as in the Previous and Degree Examinations, to the translations into the Vernacular languages. It is a subject of frequent remark, that those Natives who have shown most proficiency in their English studies are but poor Vernacular scholars, and until this defect be remedied, there is but little prospect of a sound Vernacular Literature.

20. I fully concur with the Committee as to the expediency of encouraging the study of Sanscrit and Arabic, but in this Presidency I apprehend considerable difficulty in providing efficient means of instruction in these languages, and I would therefore suggest that they be not made essential to the attainment of University Honors, at all events for some years to come.

Mathematics.

21. From the mathematical subjects, I would omit the Calculus of Finite Differences and the Theory of Probability. By the Astronomy I presume is meant Plane Astronomy.

22. The conditions upon which the Sub-Committee propose that the Degree of Master of Arts should be conferred appear to be unexceptionable.

Reports of the Sub-Committees of Law, Civil Engineering, and Medicine.

23. On the Reports of the Sub-Committees of Law, Civil Engineering, and Medicine, I have but few remarks to offer. As I have already observed, I am disposed to question the expediency of requiring that candidates for Degrees in these branches should have previously graduated in Arts, as is recommended by the Sub-Committee of Civil Engineering; and I would adopt for all these branches Rules somewhat similar to those proposed by the Sub-Committee of Law—*first*, that any candidate should be admitted to Examination after the expiration of two years from the time of his passing the Previous Examination in any Indian University, and *secondly*, in order to give facilities to students of a more advanced age, that any candidate who is of the age of twenty-one years and upwards should be admitted to Examination in the professional branches at any time after he has passed the Previous Examination in one of the Indian Universities.

24. In the list of subjects requisite for a Law Degree, I would include Political Philosophy, on the ground that a knowledge of this Science is of considerable utility to legal students. I would at the same time retain it in the list of subjects specified for Honors in the Mental and Moral Sciences.

I have, &c.,
(Signed) A. J. ARBUTHNOT,
Director of Public Instruction.

Mangalore;
Office of the Director of Public Instruction, 25th October 1855.

LIST OF TEST-BOOKS PROPOSED IN THE VERNACULAR LANGUAGES.

TELUGU.

Previous Examination.

Mahabharat.	Subhashaparinayam.
Kalugniroduyam.	Prabhavatspradynmanam.

Degree Examination.

Maun Charitra.	Raghuvapundavyam.
Vasu Charitra.	Vishnu Chittiyam.

TAMIL.

Previous Examination.

Ramayana.	Moothury.
Panchatantram, 1st and 2nd parts.	Neti-neri Villakam.

Degree Examination.

Panchatantram, 3rd, 4th and 5th Books.	Tiruvulluvas.
Naladyas	Krishnan Toothee.
	Ramavana.

CANARESE.

Previous Examination.

Rajendraname.	Dasarapada

Degree Examination.

Basava Purana.	Collection of Canarese Proverbs, published at Mangalore.
Channa Basava Purana.	

MALAYALAM.

Previous Examination

Panchatantram.	Canakusuram
Mudraruxasam.	

Degree Examination.

Bharatan.	Malayala Bhasa Vyakaranam, published in Tellicherry in 1851.

(Signed) A. J. ARBUTHNOT,
Director of Public Instruction.

No. 3580 OF 1855.

To

THE SECRETARY TO THE UNIVERSITY COMMITTEE,
CALCUTTA

GENERAL DEPARTMENT.

SIR,

WITH reference to your letters dated 10th July and 16th October 1855, I am directed by the Right Hon'ble the Governor in Council to forward to you the accompanying copies of Minutes (with Appendices) recorded by the Members of this Government on the subject of the scheme for the establishment of Universities in India

I have the honor to be,
SIR,
Your most obedient servant,
W. HART,
Secretary to Government

Bombay Castle,
8th December 1855

MINUTE BY THE RIGHT HON'BLE THE GOVERNOR, DATED 7TH JULY 1855.

1. I REQUEST that my colleagues will now favor me with their opinions in regard to the proposed University of Bombay.

2. The views of the Hon'ble Court are announced generally in para. 24 to 35 of their Despatch, and some remarks of the Government of India are contained in paragraph 12 of their letter to the Bengal Government, and in their letter to the University Committee.

3. The annexed paper indicates the opinions of some Members of the Bengal Committee on many points of much importance relative to general Degrees in Arts.

4. At present we are to inform the Calcutta Committee as to the names of the first members of our Senate, and as to our views in regard to the measures to be adopted generally.

5. Annexed is a list of gentlemen whom I propose to include in the first Senate. The Governor General has suggested that the Governors of the several Presidencies, should be Chancellors of their respective Universities. The Vice-Chancellor I believe will generally be one of the Judges of Her Majesty's Supreme Court. The members of the Board of Education will be included in the Senate, according to the expressed wish of the Court of Directors. Other names I have endeavored to select with reference, in a great measure, to general learning and accomplishment, but also in such a manner "as to give to all those who represent the different systems of Education which will be carried on in the affiliated Institutions, including Natives of India of all religious persuasions who possess the confidence of the Native communities, a fair voice in the Senate."

6. In connection with the constitution of the University, the first doubt which suggests itself to me relates to the manner of enabling students to enter as candidates for Degrees and Honors.

7. The Court of Directors suggest that the attendance required at the London University for Entrance Examinations may be dispensed with in India. It has elsewhere been recommended that there should be no Entrance Examinations at all. A more prevailing opinion favors the retention of Entrance Examinations, dispensing only with the oral portions of them, and providing for their being held simultaneously at the Presidency towns, and at certain selected Stations in the Mofussil, where arrangements can be made for effective control.

8. My own opinion is strongly in favor of retaining the Entrance Examinations and at the same time dispensing with attendance in Bombay. This might be attempted in several ways. The Examination might be divided into two parts, those only who passed the preliminary ordeal being required to proceed to the Presidency for the final one. Such an arrangement, however, would afford only partial relief. Again, Examinations for Entrance into the Collegiate Department of affiliated Institutions might be regulated so as to secure a certain uniformity, or University Examiners might be deputed to hold Entrance Examinations in the Provinces simultaneously with that to be held in Bombay. It might be difficult to carry out this latter system immediately, but when the means of communication are improved, it might, I think, be adopted with advantage. Finally, the Entrance Examination might be conducted by means of written papers and

local Committees, as suggested in Bengal. In the first instance this will probably be the best plan.

9 It is not to be denied, however, that the substitution of many Committees for one, and the disuse of oral interrogatories, are both decided evils. Provincial Committees will not personally examine those who present themselves in the Provinces. The Central Committee will not have the means of removing doubts by questioning, or of pronouncing fully upon the style of written papers, unless among its Members be included representatives of all the different languages and dialects in the Presidency. It might be advantageous to circulate to Provincial Committees, along with the printed questions to be answered in writing, other printed questions to be *vivâ voce*, and reported upon by the local examiners.

10 In addition to other difficulties, I fear that when the number of candidates for Degrees shall increase throughout the country, it will be exceedingly difficult for any central Examiners to pronounce upon all papers within a reasonable time.

11 I am inclined to think, that the principle of affiliation, although possessing some elements of usefulness, had better be dispensed with. The large recognized Institutions for general Education will of course always be the great nurseries for the University, as their schemes of Education will be specially adapted to its Examinations. It will thus generally happen, that those entrusted with the charge of children destined for the University will place them at some well-known College. But I see reasons why these establishments should not have a monopoly of training, why this function should not be confined to them, but left open to all who may really be able in fact to compete with them.

12. It is necessary now to consider the *standard* by which Entrance into the University should be regulated.

13. At the outset I would most decidedly advise and urge that no attempt should be made to fix these standards too minutely at a distance. Within due limits a certain power of adaptation and reform should be left to the local Senates. A general uniformity of test throughout India being once for all provided for, or from time to time provided for, the details should certainly be left for decision by the authorities on the spot. It would be very useful that they should annually notify beforehand the exact subjects of Examination for the next ensuing year, but there should be no attempt to oblige them to use any particular books on any particular occasions. The degree of attainment to be required at each stage being regulated, the manner of testing the actual attainments of candidates should be left to the judgment and discretion of the Senates.

14. It will be very convenient that the questions given at each set of Examinations should afterwards be published as in the University Calendar at home. Such collections form the best guide to study for University distinctions, and if judiciously made, might exercise a very beneficial effect upon the general direction and method of instruction.

15. Of the four branches (Mathematics, Classics, Experimental Physics and Ethics) in which Examinations are generally conducted in Universities of recent institution, the Entrance Examination is usually made to refer to the first three. This seems to be judicious, and should be adhered to, the fourth branch being left for under-graduate study and Degree Examinations

16 One of the most important branches of the Entrance Examinations at the London University is "Classics," which includes the learned languages of the West, as well as English and the modern Continental languages. What is to be required in this respect in Bombay? For Indian students, English is in a great measure the representative, both of ancient and modern Literature, and every candidate should undoubtedly be required to be really proficient in that language. In addition to this, he should be thoroughly master of his own Vernacular language, and should have a competent knowledge of one other of those named in the margin. According to one proposition, candidates might select any two of the above languages, English being one. The two languages might both be Classical, as English and Arabic, to a Mussulman boy. To such an arrangement I should decidedly object, as I think it would have an injurious effect upon the system of preparatory study, and a tendency to render young aspirants careless as to obtaining an early mastery of their native tongue. I would allow no exception to the rule, that every candidate at Entrance should be thoroughly examined in English and in his own language.

Greek.
Latin.
Sanscrit
Arabic.
Persian
Murathee.
Guzrathee
Canarese.
Sindee.
Portuguese.

17. It is a question, whether or not there should be an Honor Examination at Entrance. Unless it be found that there are decided practical difficulties in the way of such an arrangement, I am inclined to support it strongly. Those who have had experience of College life, I believe, are quite agreed that an Examination for Honors, even at Matriculation, may be used as a different kind of instrument for the detection of a different quality of mind It will not merely indicate that a youth can answer more fully than others a set of ordinary questions upon most subjects; but that (in some branch or branches of learning) he has been cultivating uncommon talents with uncommon zeal and success—that in short he may with great propriety be tried by a special kind of test, which would be quite unsuitable for the great majority of students, with reference to whom of course the regular papers must always be framed.

18. If it be practicable, therefore, I think it would be advantageous that there should be an Honor Examination at Entrance, and that the names of those taking Honors should be made known even if they should be unable afterwards to go on for Degrees. The distinction thus early gained will be a lasting advantage to them.

19 While favorable to Honor Examination, however, I am very doubtful as to the expediency of dividing those who enter into two classes. It is no slight to any one that he should not voluntarily go up to a difficult Honor Examination. But to some it may be a real discouragement to feel that, what all are obliged to do, they could not do well enough to be ranked in one class with their fellows Nor do I see any advantage in the proposal, for certainly I do not consider that the standard of proficiency entitling even to a Second Class Certificate at Entrance should be fixed very low. The importance of securing as much *real* proficiency as possible, at an early stage of study, can hardly be over-estimated. It affects the foundation on which all the worth of the superstructure will depend; it affects the efficiency of the Schools which supply candidates for University distinctions. Assuredly I would not

I further think, that an Honor Examination at Entrance might be made very useful as a test for the assignment of University Scholarships.

The establishment of a certain number of these would, I am inclined to think, act most beneficially as an encouragement to exertion, and they would afford the fairest means by which Government could contribute to the support of those most likely to distinguish themselves during their academical career.

bring down the standard, even in the Second Class, below that fixed for the London University. There can be no reason for subjecting our Colleges, or society in general, to an inundation of indifferent under-graduates.

20. Indeed, it seems to me, that the Rules of the London University duly modified as above explained, under the head of Classics, are very well suited for Bombay. I would not omit the elements of Chemistry from the Entrance test.

21. It seems to be intended that sixteen shall be the minimum age of Entrance, and that there shall be no maximum ; the age of every successful candidate to be specified in his certificate of Entrance. These arrangements seem to be judicious, and applicable to this Presidency; but I would not, as above noticed, give an University certificate to any one who cannot well pass the ordinary Entrance Examination.

22. After questions regarding Entrance, come those relative to Degrees and higher Honors.

23 In this connection, the first point for decision is, shall there be more than one grade of Examinations for Degrees ?

24. Many persons are inclined to dispense with any second Degree Examination, extending the term of study for B. A. to not less than four years from Entrance, and granting M. A. to all who may then obtain the lower Degree with Honors, or after a certain further term of years to all who may have obtained the lower Degree without Honors, provided they have not, in the interim, neglected their studies. This I should regard as a great mistake, and the imitation of an abuse still prevailing in some English Universities. Every candidate for the superior Degree should certainly on Examination give evidence of decidedly superior attainments. I see, too, a very strong special reason why there should be two Degrees, one as a note of sound general learning up to a certain point, which should not be too high to be imposed upon all professional students; the other as a note of more than ordinary scholarship and eminence in Science, Literature, or Philosophy.

25. In this view I would rule, that students may go up for the B. A. Examination after not less than three years from Entrance—(I think it desirable that under-graduates generally should not be lost sight of for a longer term without re-appearance)— and to the M. A. Examination after not less than two years from the date of passing the B. A. ; and I would require a B. A. Degree from all those desirous of entering on the professional study of Law, Medicine or Civil Engineering. This may at first be objected to in some quarters, but I am convinced that it is quite judicious. The Engineering student will be more appropriately and more thoroughly instructed in the higher Mathematics and Natural Philosophy while he is completing his general studies than after he has entered on the practical labours which are to fit him for his active vocation; so the Medical student can be more profitably introduced to a general and systematic knowledge of Natural Philosophy, Chemistry and Physiology before he is overwhelmed with the multifarious duties of the Dissecting Room and the Hospital. Law Students likewise should be taught, before they begin to attend in Courts or Chambers, those general principles of Jurisprudence and the Law of Evidence, without some knowledge of which no Education can be regarded as complete. All these are legitimate elements in a general

Education, and the more a professional man can learn of them, before beginning to confine himself to special studies, the more liberal and broad will be the principles upon which he will afterwards pursue and apply them.

26. With the exception of the branch of Classics or Languages, (in which the modifications indicated in the annexed paper would be necessary,) I think the standards for B. A. or M. A in the London University would apply to Bombay with very little alteration. Indeed, I can see no object in deviating from the rules or standards of the more recently established English Universities, which were arranged by experienced and sagacious men, and have been pointed out as the best models for India.

27. I see no reason why there should be two classes of ordinary B. A. Degrees. If it were proposed more enduringly to distinguish those who take Degrees with Honors from the holders of ordinary Degrees, there would be much to urge in favor of that plan ; but I see little prospect of advantage from any sub-division of the ordinary grade. The natural tendency of such a rule would be to lower the standard for ordinary candidates, who are less proficient than they might be, and to this I am decidedly opposed.

28. As already stated, the Regulation for B. A. Examinations in London, as modified in the annexed paper, seem to be well suited for the present purpose, and the Examinations for Honors in connection with the same Degree should be framed on the analogy of similar ordeals in England. It seems to be a question whether the branch* in which any one may have graduated with Honors might not be afterwards designated in his titles

29 The remarks in the last paragraph also apply entirely to the separate Ordinary and Honor Examinations, which I should wish to see instituted in this country for M A Degrees It might be well in this grade also permanently to distinguish Honor from Ordinary Graduates, and even Honor Graduates, into classes corresponding with the special branches in which their honors have been won.

30. It is not intended, I presume, to omit Geology from the branch of Physical Sciences, nor Political Economy from the Moral Sciences, nor the comparative study of languages from the branch of Classics

31 The distinction between Mathematical and Experimental Physics, which prevails in Dublin University, seems to be very expressive and worthy of adoption here.

32. On the question of titles, I would say that, if the standards to be exacted in India can be placed on a level with those adopted in Great Britain, the denominations by which they are to be indicated should also be the same. It is desirable that an Indian Graduate and an English Graduate should be as nearly as possible of the same class of scholars, both having this at least in common, that up to a certain point they have appro-

* Mathematics, Classics, Experimental Physics, Ethics.

priated equal proportions of the best knowledge within their reach, and are entitled in equal degrees to the regard of their respective communities.

33. I am inclined, therefore, to think, that the caution offered in the middle sentence of para. 7 of the letter from the Supreme Government to the University Committee is perfectly sound and just; but that the doubt expressed in the concluding sentence of the same paragraph ought not to be allowed too much weight.

Should it be determined, however, to establish them, I am inclined to think, that it would be proper to admit to the Degree of M. A. such students as take a creditable professional Degree, without requiring them to pass that superior Examination which will be necessary to qualify ordinary B. A.'s for the M. A. Degree.

34. The subject of professional Degrees is so extensive, and so complicated with practical details and questions of privilege, that I am not prepared at present to express a full opinion in regard to it. I have made references to many of those whom I deem best qualified to judge as to Legal, Medical and Engineering matters, and I propose hereafter to make known the result in a separate Minute. In the mean time, I think it would be well to obtain from the Supreme Government some intimation as to the proposed character of the new Degrees in Law, with especial reference to the privileges which will accrue to holders, and the classes of persons of whom such Degrees are to be exacted.

35. It is proposed, I see, to admit to Degree Examinations all who, after passing the Entrance Examination at any *Indian* University, have prosecuted their studies during the proper term of years. I would omit the word "Indian" from the above, for I do not at all see why Under-Graduates and inferior Graduates of all recognized British and Indian Universities should not be regarded as reciprocally admissible, after due preparation, to any Examinations for higher titles in any University which may be nearest at hand.

36. I would also make some special provision for the early Examination (for B. A. Degrees) of all young men above the age of (say) twenty-five years, in regard to whom it may be certified by their last Teachers, that there is some reasonable prospect of their success.

37. University Professorships of Law, of Civil Engineering, and of the Classical and Vernacular languages of India, are suggested by the Court of Directors. The Governor General however doubts the necessity of this, if proper provision for their studies be made in separate Colleges, or separate departments of a Presidency College. This is also my own opinion decidedly, with this proviso, that the lectures of the said Professors should be open, on reasonable terms, to all comers, (not only to those regularly pursuing the whole course of instruction imparted at the College in which they are given,) and that the hours fixed for the lectures be such as appears to be most generally convenient for the Students and Teachers of all the neighbouring Institutions.

38. As regards the University Charter, I see no reason to suggest any but the most obvious alterations of those relating to the London University.

39. An opportunity will, I trust, be afforded to this Government, of offering its opinion upon any Report which may finally be made by the Calcutta Committee before that Report shall be adopted by the Supreme Government. I trust also that some

information may be afforded as to the exact duties and propositions of the Chancellor, Vice-Chancellor, Registrar, and Examiners of the University.

(Signed) ELPHINSTONE.

THE RIGHT HON'BLE LORD ELPHINSTONE, G. C. H.
THE HON'BLE SIR W. YARDLEY, KT.
THE HON'BLE J. G. LUMSDEN.
THE HON'BLE A. MALET.
M. LARKEN, ESQ.
JUGGONATH SUNKERSETT, ESQ.
BOMANJEE HORMUSJEE, ESQ.
DR. BHAWOO DAJEE.
M. STOVELL, ESQ.
SIR JAMSETJEE JEEJEEBHOY, KT.
MIRZA ALEE MAHOMED KHAN.
MAJOR GENERAL WADDINGTON, C. B.
W. HOWARD, ESQ.
WM. FRERE, ESQ.
DR. DON *Inspector General of Hospitals.*
THE REV. W. K. FLETCHER.
H. B. E. FRERE, ESQ.
J. J. BERKLEY, ESQ.
EDWARD HOWARD, ESQ.
PRINCIPAL HARKNESS, M. A.
MAJOR CANDY.
DR. MOREHEAD.
PROFESSOR FRASER.
THE REV. P. ANDERSON.
LIEUT.-COLONEL SCOTT.
LIEUT.-COLONEL LANG.
THE REV. DR. WILSON.
W. P. ADAM, ESQ.
H. L. ANDERSON, ESQ.
LIEUT.-COLONEL JACOB.
REV. M. PEMSTON.
DR. PEET.
DR GIRAUD.
PROFESSOR SINCLAIR, L. L. D.
PROFESSOR REID, L. L. B.
THE DIRECTOR OF PUBLIC INSTRUCTION.

MINUTE BY THE HON'BLE J. G. LUMSDEN.

1. I REGRET that there has been some delay on my part in disposing of this subject.

2. In the 3rd para. of the Right Hon'ble the President's Minute, he speaks of an annexed paper as indicating the opinions of some Member of the Bengal Committee, on many points of much importance relating to Degrees in Arts.

3. That annexed paper did not accompany the Minute, nor did I receive it until the 18th of August ; and as the subjects and opinions therein discussed were freely alluded to in the Minute, it seemed necessary to wait for its receipt.

4. From the letter from the Government of India to the Government of Bombay of the 26th of January last, it did not otherwise appear that much remark was called for on our part in regard to the scheme for the Bombay University.

5. In the 1st para. of the letter of the same date, from the Government of India to the Committee for the establishment of a University at Calcutta, Madras and Bombay, the duty of preparing a scheme, which shall be common to all three Presidencies, is delegated to that body.

6. I can see no reason at all for demurring on the plea of *local* circumstances to the details of such a scheme as the gentlemen placed upon the Committee may regard as the best for the Presidency of Bengal. There are no *local* distinctions between the several Presidencies of a nature to suggest any material diversity in framing a common scheme for extending Education in this country, and raising the standard of it.

7. Had not the Right Hon'ble the President entered very fully into some of the questions which have been raised before the Calcutta Committee, and which affect the general scheme, I should probably therefore have confined myself to an expression of the above opinion on an assurance that I had no objection to offer to the list of gentlemen whom he proposes to include in the first Senate.

8 He has however invited our comments, and I consider therefore that I am called on to record my assent on his remarks, or to state where I differ from them, which I shall do as briefly as I can.

9. I will first roughly outline what I conceive to be the distinguishing features of the proposed University.

It is, as far as practicable, to resemble in its constitution the London University.

It is to be governed by a Senate at the Presidency, who are to award Degrees and Honors.

Certain Educational Institutions, as Schools of a superior character in the Provinces and Colleges at the Presidency or elsewhere, which may hereafter be approved and admitted by the Senate, are to be affiliated to the University, by which I understand that *they are to bear the same relation in general respects to the University of Bombay that the Colleges of Cambridge and Oxford respectively bear to those Universities.*

Any candidate for Degrees or Honors to be granted by the University must, before his Examination will be permitted, produce a certificate that he has studied for a period of four years at one of these affiliated Schools, that he has conformed to the prescribed rules which entitle him to present himself for Examination, and that he has borne a good character.

Candidates for Honors and Degrees at the University will be expected to pass an Entrance Examination, either at the Presidency or in the Mofussil, analogous to the Examination passed on entering an English University, before he can be admitted into the collegiate department of these affiliated Institutions. This Examination, however, has by some been thought unnecessary

The Examination for Degrees and for Honors must be held at the Presidency before a body of Examiners appointed by the Senate.

10. I will now follow our President's Minute in the order of the several paragraphs.

11. I agree with him in thinking, that candidates for University Degrees and Honors should pass an Entrance Examination previous to their admission into an affiliated Institution.

The rule will confine the University Examination to a class who have, at the entrance of the collegiate career, given proof of having attained to a certain standard of Education.

12. The standard fixed for this Examination, I am of opinion, should also be, as far as it can be, made so analogous to that required at the Entrance Examination at our own Universities, or rather at the London. I think it would be a mistake to pitch it too high, and one that in this country should be carefully avoided.

13. I greatly doubt the expediency, if not the practicability hereafter, of conducting these Examinations by means of written papers, such as are now in use in our own District Examinations of public Officers. I doubt it from the immense correspondence and great delay which such a system would occasion.

14. We should make a special provision, I think, for the inconvenience of having our affiliated Schools and Colleges spread over the wide extent of the Presidency. A small body of appointed University Examiners should travel through the Presidency, paying periodical visits to the different affiliated Institutions, and if necessary *(though I do not think this will hereafter be the case)* to other central spots, where candidates desirous of entering the collegiate department of an affiliated School can present themselves. As the course of study, preparatory to an Examination at the Presidency for Honors or Degrees, is to be conducted in the Districts, it would be the height of hardship to call on all the young aspirants throughout the Presidency to visit Bombay for this preliminary Examination.

15. I trust that there will be no restriction in regard to the number of affiliated Schools, but that hereafter we may find it possible to affiliate one or more Schools in every District or Province in the Presidency, so that the means of collegiate training may be provided for the people at their very doors. I consider that one of the earliest objects to be steadily kept in view by the Director of Public Instruction should be to provide for this want ; and where he thinks that a School is capable of being raised to the standard necessary to admit of its being affiliated with the University, that he should specially turn his attention to its improvement.

16. Paras. 12 to 16 inclusive—I agree generally in our President's remarks in these paras.

17. Paras. 17 to 19 inclusive—I also entirely concur in the opinions expressed in these paras. If youths are prepared for, and desirous of, passing for an honorary Degree on the occasion of their Entrance Examination, I think it would be a pity to baulk them. I prefer this plan to a division into two classes. There may be something invidious in forcing a youth to either succeed in becoming one of a superior class or to be ranked in an inferior grade. The latter might unfavorably affect his whole future career, while there is nothing to depress a man who has never attempted to secure an honorary distinction on entering College, and to discourage him in the pursuit of University Honors. On the other hand, a youth who has aimed this preparatory Degree of Honor, and has attained it, has given a guarantee for future excellence and distinction which he is not likely to forfeit.

18. It is also clear to me, that having once past the Entrance Examination, no student of good character should be prevented from hereafter presenting himself at the final University Examination as an aspirant for Honors or Degrees. I concur, as will be apparent from the preceding remarks, in para. 19 of our President's Minute. I also concur in paras. 23 to 31 inclusive.

19. But I cannot rest satisfied with recording a mere assent in the opinions and arguments contained in the 32nd para.

20. If it be a question whether we are, in India, to adhere to the custom of English Universities, and to grant Degrees of B. A. and M. A., &c., or to substitute another and perhaps a more critically correct nomenclature of titles, intended to imply that their recipient has attained to a certain standard of Education, I sincerely hope that the time-honored and ancient terms so familiar to English ears, and so connected with English history, may be preserved. The critical propriety of a term as expressive of the exact meaning intended to be conveyed may be of less consequence than the associations connected with the more ancient terms, in themselves less correct perhaps, but from long familiarity understood as well, and far more valued. This would be an argument, it may be urged, against a change in mere titular University distinctions *at home*. But who shall say, that at some future period, when the political connexion between this country and our fatherland has long been severed, these well-known and familiar titles may not still be preserved in the Indian Universities, forming the links of a moral connexion which they help to maintain between the respective countries, recalling a period when the power which we possessed, as the foreign Rulers of India, was not selfishly misused, but was honestly employed for the noblest and most disinterested of objects, the advancement and benefit of the people.

21. I have no further remarks to offer upon our President's Minute, in which it will be seen that, with a very few exceptions, I cordially concur.

(Signed) J. G. LUMSDEN.

MINUTE BY THE HON'BLE A. MALET.

It seems desirable that this subject should be disposed of as soon as possible, and after the Minutes of our Hon'ble President and the Hon'ble Mr. Lumsden, any remarks I wish to make may be very brief.

If the system of affiliating Schools and Colleges to the University be determined on, provisions should I think be made of the commencement for the entry of those who have not studied at such affiliated Institution, the special cases alluded to by the Sub-Committtee of Arts being provided for as recommeded by them.

In the test for admission in languages, I am of opinion that English or the candidate's Vernacular should suffice, or when English is his Vernacular, that and one other, either Classic, Modern European, or Oriental. The intention to place those who enter in two divisions seems to me to be sufficient without Honors, students in both divisions

being competent to try for any Honors subsequently. The bestowal of Honors on Entrance would I think render them too cheap.

I concur in the expediency of permitting Provincial Examination for Entrances, and in paras. 21 to 32 of our President's Minute.

With reference to professional Degrees, I think that the previous attainment of the Degree of B. A should not be dispensed with.

The information suggested in the latter part of our President's 34th para. seems requisite. I concur in paras. 35 and 36.

The Government of India does not contemplate the appointment of University Professors, if the latitude for attendance at the lectures of College Professors, suggested by our Right Hon'ble President, in his 37th para., be allowed. I see no objection to this, otherwise I apprehend that University Professors will be necessary.

(Signed) A. MALET.

FURTHER MINUTE BY THE RIGHT HON'BLE THE GOVERNOR, DATED THE 9TH NOVEMBER 1855.

1. AFTER reading what my colleagues have written in regard to the proposed University in Bombay, it seems to me that our views are very much the same, and that their Minutes do not call for any further remarks on my part of a general nature.

2. Since expressing my opinions, however, I have perused the Draft Reports of the University Sub-Committees in Calcutta, and have consulted some of those who are best informed as to professional studies and practice in this Presidency; and with reference to para. 34 of my Minute, it may be proper to express in a few words the views to which I have been led in regard to professional Degrees.

3. In paras. 24 and 25, I urged, with some earnestness, that a preliminary Degree of B. A should be required of all who may wish to enter for professional Degrees. I adhere entirely to this belief, and attach to it the greatest importance. The adoption or rejection of such a course will determine the whole character of the University on its purely practical side. I beg to urge most strongly, that a high general preliminary standard be exacted, without exception, of all candidates for University Degrees in every profession.

4. The Sub-Committee of Civil Engineering have recommended, I perceive, that a Degree of B. A. should be required of candidates for professional Degrees in their faculty; but they suggest a relaxation of this rule in favour of students in the Government Colleges, which I must consider inconsistent and unwise. The Sub-Committee of Law have recommended that a Degree of B. A. should be required of candidates for Degrees in Law, but they likewise bring forward an alternative suggestion, which in my opinion cannot fail to have an injurious effect. The Sub-Committee in Medicine admit that it would be most desirable to receive only such candidates as have qualified in Arts, but

they only bring themselves to expect this consummation hereafter "in the future progress of Education in India."

5. I see no reason why it should not begin to be enforced from the date on which the University may begin to confer its Degrees of B. A.

6. The Government of India can have no desire to suggest, that mere professional expertness is all that should be required of a professional Graduate. Practical shrewdness, aptitude for the details of business, special knowledge of any kind, as a Lawyer, Doctor, Engineer, are excellent things, and will find their own rewards; but these are not the qualities on which, through the University, it is the great object of our Government to set the seal of its approval. If intelligent men be brought to the thresholds of the professions and admitted to the benefits of instruction, there can be no doubt as to their professional advancement. Even without Degrees, the Colleges will gradually supply as much practical skill of as high a kind as the community can afford, or will consent to remunerate. Even with Degrees, they will not long supply more, and although the creation of a class of skilful native practitioners will be a great benefit and a great triumph, still there is a higher view than this of the present question—a view which must not be postponed to this; for assuredly the future of these very professions, and even of native society itself, will depend less upon the special skill and dexterity of those who are to be the advisers of all classes in their common dealings and pursuits than upon the liberalty of their general views, the purity of their characters, and the soundness of those principles of thought and action which will give a colour to their lives and example. In a letter which has been placed at my disposal, Sir William Yardley has forcibly pointed out the danger of mere legal training without that high tone of professional morality which, in England and Scotland, is found to be the safeguard of men's most intimate confidences; and Mr. Howard, to whose able Report upon Law Degrees I shall presently have occasion to refer, expressly states that "it is in itself positively injurious to the mind to commence a study that requires so much precision of thought, except upon a broad previous foundation; the tendency of the study of any system of Law is undoubtedly to narrow an uncultivated mind." I believe that a similar objection applies to the other two branches for which professional Degrees are to be granted, and that in those whose moral faculties have not been carefully cultivated, or who are not under the influence of strong religious conviction, their studies have a materialist tendency, which it is important to counteract.

7. I dwell upon this subject, because I do not think that its importance can be over-rated. There is, in India, a very small class of persons who can hope to live otherwise than by their own exertions. Of those who live by their labour, the most influential, at present, are the bankers, the merchants, and the higher servants of the State. It is not difficult to believe, that in India the two former pursuits are unfavorable to study and to moral discipline, while an Officer of Government cannot usually command as large a share of private confidence as a person of equal ability in an independent position. The leading members of the liberal professions, therefore, will probably form a kind of intellectual aristocracy by themselves; they will exert a great moral influence, and will communicate their own opinions and habits to their fellow-countrymen. If so, it must be an object of the highest importance to elevate as much as possible the standard of principle and character among those professional Graduates on whom we are about to confer the only titular distinctions which we have to bestow, and who will be

regarded in some degree as though exponents and representatives of European ideas and civilization. For other defects among them, there may be other remedies, but the evil of inadequate general Education can only be averted by Government, and can be fully averted only in the very outset.

8. It is notorious that in England imperfect legislation on professional matters has been a source of infinite mischief and demoralization. Until within the last twenty years, the professional Colleges and Companies alone conferred licences to practice in Medicine; the two older Universities alone awarded Medical Degrees. The former bodies very naturally confined their Examinations to mere special skill, and the proportion of University Graduates to general practitioners was never so great as to raise the character of the entire profession. In Law, the anomaly was, if possible, more striking. The University conferred Degrees which conveyed no right to practice, and the Inns of Court admitted to practice without making inquiry as to qualifications. In Engineering, I believe, no one need obtain even now any diploma to practise his profession, and no University is empowered to confer a Degree in connection with it.

9. It seems quite obvious, therefore, that the Indian Government must not, in this case, be guided by "home precedents," but must act for itself, using the experience of England rather as a warning than as a guide.

10. For these reasons, it is with regret that I observe in some gentlemen of experience here, and even in the Reports of the Sub-Committees, a tendency to sanction the practice of transferring boys immediately from schools to professional study, without any intermediate training of a collegiate nature, or with only a very intermediate training.

11. I do not understand how a school-boy can really be fit to enter at once upon a professional career. He has hitherto been strictly in a state of pupilage, his conduct has been regulated by an authority which he was not to question, and even his knowledge has been resting upon rules enforced by authority. He has not been thoroughly proved, either as to moral purpose or mental energy; he has never been thrown upon his own resources. This is what happens to him at College. Principles begin to take the place of authority, and rules are superseded by reasons. On this account, the few years of College life are singularly important in the formation of character, and especially valuable to every one who is to lead an active life.

12. But even to the mere student their value is exceedingly great. Almost for the first time he feels responsible for his own progress, and works according to his own plan. The facts and formulæ of his school-boy days are now construed to his mind in thought. He begins to mature his knowledge. Two or more years are devoted almost exclusively to "permanent studies,"—that body of approved Science and Literature in regard to which all men have long been of one mind. It is only in the latter part of his course, after long and steady discipline, that he is finally brought face to face with "the progressive studies," the Literature and Science of his own day, which thenceforward will chiefly engage, if not engross, his attention; and it is only after this careful training that a young man is regarded as qualified to take part in the affairs of the world. Surely any less careful training should not be held to qualify for entrance upon a professional career.

13. I am very anxious that this should be admitted, and that it should be admitted *in time*. It is easy now to prevent a great mischief, which hereafter it will be very difficult to correct. Indeed, the few objections which I have heard people urge against the high general Education for which I contend, appear to me to be founded upon a misconception.

14. It is urged, for instance, that if this preliminary test be exacted, the number of candidates for Degrees will be excessively small. Such a statement, if demonstrated, might be a very good argument for delaying the foundation of a University, but can never be accepted as a reason for deteriorating the quality of its Degrees. I trust, however, that the statement itself is erroneous.

15. Again, it is urged, that by exacting such a test, you limit very much the numbers available for professional employment in the Public Service. This objection supposes that none are to be employed but those who have taken professional Degrees. I do not advocate such a regulation; on the contrary, I think it would be premature and injurious. The professional Colleges should not close their doors against all but Under-Graduates of the University. The Public Service has need of all the talent and skill it can command from every quarter. No present change need be made in these respects, except as regards the highest grade of public Offices. If it should hereafter be found, that the number of professional Graduates who desire to obtain public employment is sufficient to meet the requirements of the Public Service, such a state of things will of itself prove that the ground of this objection has been removed.

16. The only other difficulty which has been noticed to me relates to the additional expense of taking a professional Degree, if a general Degree is first to be taken. I do not attach much weight to this objection. The cost of Education in this country is uncommonly, if not excessively, small. The number of Scholarships and Exhibitions will apparently be uncommonly great, and if a young man may enter as a University student at sixteen, take his Degree of B. A. at nineteen, and obtain his professional Degree at twenty-two or twenty-three, I do not think that he will have any ground of complaint, or that the community would be benefited by his earlier emancipation.

17. I have noticed (in para. 25 of a former Minute) the course which would, in my opinion, qualify for a B. A. Degree. Beyond exacting an elementary knowledge of Chemistry at Entrance, I would not assign a prominent place to the Physical Sciences in the first or even in the second year's courses. In the third year they would engage more of the student's attention, as he would then be maturing his knowledge of the state of Science generally, and preparing for a more exact study of those especial branches which would form part of his professional accomplishment.

18. I should expect a great deal from an arrangement of this kind, and desire very strongly to recommend it, but I have delayed long enough upon this part of the subject, and will pass on therefore to the proposed Courses and Examinations for each of the professional Degrees separately.

19. And first, as to Medicine, provision has already been made in this Presidency for the scientific study of Medicine. The Grant College has been conducted with singular judgment, and the professional attainments of its Graduates are admitted to be

very considerable. I would net interfere with a College system which is working so well, unless where this may be indispensable to the proper working of the University system.

20. Now, if the scheme of study at the Grant Medical College were to be modified according to that proposed by the Sub-Committee of Medicine, the changes in most respects might not be very great, but I fear they would be very injurious. The amount of training, and especially of practical training. and with it of course the qualifications of Graduates, would be lowered and not raised by the alteration. I entirely concur in the opinions expressed on this point in the annexed papers by the Government Examiner,* and the Officiating Principal of the Medical College.† I know also that the late Examiner ‡ and the present Principal are both strongly of the same mind. I should esteem it a great misfortune to learn that Degrees are hereafter to be conferred by the University upon easier terms in any respect than those on which diplomas are now awarded at the College, for we have not here a nominally high standard, with a really lax application of it. The clinical instruction at the Jamsetjee Hospital has been no mere pretence, the College Examinations have been searching and practical, and could hardly be rendered more so under any system.

21. I must therefore strongly deprecate any curtailment of the medical course at present exacted in Bombay, and any degradation of our practical standard of professional qualification. The existing course may be compressed into four years, if that be deemed requisite; but beyond this, I earnestly hope that no interference will be attempted.

22. It would then only be necessary to enjoin that the present preliminary test should be rigorously exacted of all ordinary students at Entrance, and gradually raised for all, when practicable; that candidates for professional Degrees should be admitted to study at the College in virtue of their Degrees of B. A., and not otherwise; that the existing course of medical study should continue to be sedulously inculcated in all its branches, and that the closing Examinations should be as strictly searching and practical as heretofore, comprehending the general principles of treatment, and not confined to mere details of symptoms and remedies.

23. I do not feel competent to express an opinion as to the details of the proposed courses, but this seems hardly necessary, as I sincerely trust that no great changes will be insisted upon. The double (or *Biennial*) Examination of students (but without Honors) might perhaps be introduced here as in Calcutta; but, if adopted, the first should be a collegiate one, and the decision of the point may I think be confided to the College authorities or the local Senate.

24. The same remark applies to the proposals for Medical Fellowships and Prizes, in which I entirely concur. The settlement of all details connected with them should be left to the Senates, which can also decide whether or not the Fellows should be employed in tutorial instruction, as proposed by Dr. Don.

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* Appendix A.

† Appendix B.

‡ Dr. Maclennan, who had greater experience in the Medical Education of the natives than any one, having been the first I believe to attempt to impart medical instructions, properly so called, in India, and having been nearly thirty years engaged in the work.

25. It has been remarked by Dr. Giraud, that the scheme of Botanical Examination, proposed in the Appendices to the Sub-Committee's Report, is not adapted to test the attainments of Indian students. The list in Section 1 he regards as too extended; and Section 2, he would not select natural orders that have their chief representatives in extra-tropical countries, but such as are characteristically tropical He would also attach more importance to Structural and Physiological Botany. I have no doubt that he is quite right, but this also can be better settled, I believe, by the Senates.

26. The Sub-Committee consider that there should be two Degrees in Medicine, the lower to be called Graduates, and the higher Doctor. Graduates, they think, should not be styled Doctors, even by courtesy. They would give special rewards and encouragements to high proficients, and believe that the best students would remain in the University (to qualify as Doctors of Medicine) if they might thereby enter the Government Service at once as first Class Sub-Assistant Surgeons, and be advanced rapidly to responsible offices and to higher salaries.

27. I think there should be two Degrees, but the lower should be styled Bachelors, not Graduates—a title, as I have been justly reminded, which is not applicable to inferior and merely inchoate Degrees. I concur also entirely in the suggestion for securing to Doctors a preferential claim to the highest grade of appointments and salaries in the Public Service, and I trust that this prospect may induce many to persevere in their studies, in order to obtain the superior title.

28. Dr. Giraud has suggested that candidates for the Degree of Doctor should write and defend a pathological thesis, and this seems to be a very good proposal.

29 I must request particular attention to the clear and decided views expressed by Dr. Peet in the able Minute which accompanies this paper.* I have already stated my concurrence in the opinions urged in paras. 3 to 14, and I have now to add that the remarks in paras. 15 to 18 have also my entire approval, and appear to be well worthy of consideration by the authorities in Calcutta. Further study and a higher scientific qualification should, in my judgment, be indispensable in candidates for the higher Degree of Doctor.

30. There is one part of the above arrangement which I have suggested with regret and from necessity—that, namely, which contemplates the admission of other than University students (that is, students possessed of a lower preliminary qualification than the Degree of B. A.) to all our professional Colleges. This may lead, I am aware, to jealousies and dissatisfaction in particular cases, but I do not see how it is to be avoided. It is not possible either to place restrictions upon general practice at present, or to refuse instruction to all but the highest class of students. To make any attempt at the former measure would be quite preposterous, while the number of skilled practitioners is not sufficient to meet the wants of one-twentieth part of the community. Even the latter measure cannot be wisely attempted, for it would infallbly result in one of two serious evils: either a fatal diminution in the number of candidates for professional employment in the lower grades of the Public Service, or an undue degradation of tests for the higher University distinctions. I feel constrained to conclude, therefore, that as a provisional arrangement, general students must still be admitted to study at professional

*Appendix B.

Colleges on the same terms as at present, though the terms on which University students are to be admitted should at once be raised. If preliminary tests in connection with the University be lowered, it will be very difficult to raise them; but if the present practice be merely tolerated while necessary by the Colleges, it can be discontinued without difficulty as, and when, it may be possible to dispense with it.

31. And, no doubt, the duration of the imperfection will be directly measured by the efforts of Government to improve the prospects and states of the higher Graduates. If adequate means of study, and motives to study, be assiduously provided, there can be no apprehension as to the ultimate result.

32. But I must now refer to the proposals for Degrees in Civil Engineering. The subject is one of great difficulty, and I touch upon it with much diffidence.

33 The Calcutta Sub-Committee have made their proposals with reference to the constitution and objects of the Civil Eegineering Colleges in Bengal. This seems to be an inversion of the proper method of procedure. The Colleges should adapt themselves to the requirements of the University. The University should stand upon its own foundation and have its own objects. It should know exactly what it intends to require of all candidates for a particular title, and should not be much affected by local peculiarities of the Schools.

34. Indeed, there seems to be some ground for the observation of the Chief Engineer (in one of the letters now circulated.) that the remarks of the Sub-Committee "indicate a too indefinite conception of the nature and object of the Civil Engineering Degrees" They do not seem to have made any great attempt at selection. Now the best claim of such a scheme to commendation must be this, that whereas a selection has to be made, it has here been made in the most judicious manner possible.

35. In substitution of the plan propounded by the Sub-Committee, which is not approved by Officers of experience here, I would strongly recommend an arrangement somewhat similar to that which obtains in the School of Engineering in Dublin, (*see* the Dublin University Calendar of 1854, pages 56 to 59.)

36. Supposing that the curriculum in India were framed upon this model, and that no student were admitted to the first year's course untill he had passed his B. A. Examination, it would be quite possible to compress the professional studies of Engineering candidates into three full years, as follows:

I.—1. Mathematics (*ex hypothesi*, the Candidates would be familiar beforehand with Arithmetic, Algebra, Geometry, Conic Sections and Plane Trigonometry); 2. Theoretical Mechanics (they would have been introduced to this study also in the general branch); 3. Chemistry and Mineralogy, as applied to the arts of construction, (they would know a little Chemistry); and 4. Drawing and Perspective.

II.—1. Practical Mechanics, Machinery and the use of instruments; 2. Mathematical Physics (students would have a prior elementry knowledge of Natural Philosophy and Astronomy); 3. Practical Chemistry (with field lessons on Mineralogy and Botany); 4. Drawing, Surveying and Levelling; 5. Practical Engineering, (including buildings, as well as works of communication and irrigation.)

III.—1. Geology and Physical Geography (of this last a little would have been previously acquired); 2. Sketching, Surveying and Levelling in the field; 3 Practical Engineering (including Railway Manufacturing and Naval Works); 4. Field Works; 5. Designs and Estimates.

37. In addition to this, there should, if possible, be some good lectures on Sanatory Engineering, and certainly some thorough practical instruction in the art of Building, including carpenters', smiths', and masons' work, knowledge of cements, brick-work, &c.

38. I must deprecate any attempt to give high artistic instruction in Architecture to Engineering Students during their short College curriculum. It would be a premium upon smattering, and would tend, I fear, to make the Degrees ridiculous.

39. On the other hand, the suggestion of Colonel Turner and Major Crawford, for a higher Degree in the Engineering faculty, to be conferred after five years' successful practice upon men of high attainments, who have previously taken the inferior Degree, appears to me to be extremely judicious. The association of energetic and distinguished men of this description, with the University titles, would establish their value in general estimation more than any other measure.

40. The remarks already made as to terms on which general students should be admitted to the Medical Colleges, are equally applicable to those of Engineering, and certainly the Graduates in this faculty should also be allowed, under due limitations, a preferential claim to employment in the higher grades of the Department of Public Works.

41. I would make no special concessions as regards general Education to pupils in the Civil Engineering Colleges, as proposed by the Sub-Committee, and earnestly hope that none will be allowed.

42. Colonel Scott, I perceive, does not consider that any useful distinction can be drawn between a Mathematical and Civil Engineering Degree, even as respects the theoretical branch of the subject. In this view I can by no means concur. Thorough Mathematical knowledge is no doubt the first and greatest accomplishment of a Civil Engineer, though in that branch (even) his studies are specialized as they become professional. But he must also have a sound knowledge of Experimental Physics, especially Chemistry and Mineralogy; his eye must have been trained to observe, and his faculties to describe, the configurations and peculiarities of every description of country; he must be a practised Draftsman, and (apart from his purely practical training) in the application of Mathematical principles and formulæ to ascertain class of facts, he must have made a progress and acquired a facility which is often quite foreign to the mere Mathematician. Of course the purely scientific attainments of the Engineer can be tested by Examination with more perfect accuracy, but his practical proficiency also can be tested with a sufficient approach to accuracy, and I quite subscribe therefore to the judgment with which General Waddington closes his letter.*

43. The only remaining professional Report is that of the Sub-Committee of Law. This Committee took the London University as their model. As however the Law

* Appendix C.

Examinations in London are not adapted to a country in which several systems of law and forms of procedure are recognized, they have suggested considerable modifications, especially in regard to Municipal Law.

44. One professor (according to their scheme) would deliver lectures on General Jurisprudence, and on the elements of Civil and International Law; and the University would also require "a certain degree of practical and technical knowledge of the Law of England in many of its branches."

45. As regards conditions and subjects of Examination, they would examine any student one year after he had taken the Degree of B. A., or four years after he had entered at the University (even if he had not taken a Degree,) or at any time after Entrance, if he were twenty-one years of age. They would examine on the general principles of Jurisprudence by means of one paper, and on "the several systems of Municipal Law which obtain in this country" by means of three papers— 1, on personal rights and status, including adoption among Hindoos; 2, on property, including contracts and succession; and 3, on rights and remedies, including principles of Procedure, Law of Evidence, and Criminal Law.

46. It seems to me that these measures would be altogether insufficient to secure the object for which they are proposed. As, however, my views on this subject are almost entirely in accordance with those of Mr. Howard, as expressed in the accompanying Memo.,* I will merely commend it earnestly to the attention of my colleagues, and of the Committee in Calcutta, who cannot fail to be struck by his lucid and forcible statements.

47. On two points I think the suggestions of Mr. Howard may be modified with advantage—*first*, I see no reason for refusing Honors at the Bachelor's Examination, and *second*, I would not award the Doctor's Degree until five years after the inferior Degree had been taken, and then only to those who had intermediately risen to eminence in the study and practice of the Law.

48. With these exceptions, I entirely concur in Mr. Howard's remarks, which I have read with the greatest pleasure, and which are full of sound and practical good sense.

49. It cannot be repeated too often, that students must not be encouraged to pass directly from the school-room to a professional career, or to enter upon their special studies without a high preliminary training; neither is it to be imagined that a habit of sound judicial reasoning and a thorough acquaintance with the principles of legal science will be acquired by natives of this country in less than three full years of diligent collegiate study.

50. As to the branches of study which should be presented to the student in each year of his legal curriculum, he would have acquired as a part of his general Education some knowledge of Moral Philosophy, Logic, and the Elements of Jurisprudence. His first legal year might commence with a comprehensive review of these subjects; a more

* Appendix D.—This is a rough Memo., *not meant for the public eye.*

searching inquisition into the foundations of Law and moral obligation; a systematic classification of the great branches of public and private Law; a survey of the history of legal Science and national constitutions, with especial details as to the Roman Civil Law and the International Law of Modern Europe. The next year's course might be devoted chiefly to the Constitutional and Municipal Law of England (including those subjects on which the Sub-Committee wish to propose Examination Papers) and to the principles of Commercial Jurisprudence. It might include instruction as to the Indian Government and Legislature, and the status and duties of a good citizen and a good Magistrate, both in India and England. The year should not close without an introductory course on the Criminal Law and the Laws of Procedure and Evidence. A more complete course upon these last subjects would open the third year, during which the student should have opportunities of going as deeply as may be necessary into the systems of Law administrated by the Queen's and Company's Courts respectively, including the proper branches of Hindoo and Mahomedan Law.

51. In connection with this subject, however, I would refer to a very interesting letter from Professor Reid, paras. 13 to 20,* and also to para. 12 of his printed Introductory Lecture,† both of which are among the accompaniments to this paper.

52. As regards the privileges to be associated with Law Degrees, I think that the Graduates in this faculty should be relatively in the same position as the Graduates in other faculties. The University should have nothing to do with restrictions upon practice, but its Degrees should be universally recognized as certificates of fitness to practice, not that particular Courts are to be prevented from requiring special qualifications in those admitted to their Bar, but that nothing should exclude a University Graduate from any Court, except the proved absence of such qualifications.

53 And especially the worth and dignity of a legal Degree should be openly recognized by the Government. Hereafter, all the higher magisterial and judicial offices in the Public Service should be conferred exclusively upon those who have obtained them; and every anxiety should be shown to secure for their holders an honorable position in society.

54 Before concluding, there are one or two other points to be noticed.

55. On a former occasion, I did not sufficiently express the satisfaction with which I had read the remarks of the Sub-Committee of Arts on the study of the Classical languages of India. Their observations seemed to me to be excellent, and I trust that we may soon be able to encourage the pursuits they contemplate, and comply with the wishes of the Court of Directors, by appointing European Professors of Sanscrit and Arabic, in connection with the Elphinstone College in Bombay.

56. I noticed before, that the omission of Chemistry from the University Entrance Examination seemed to be an error. That Science gives such new and fruitful ideas of matter, that an early knowledge of its general principles can hardly fail to be beneficial.

57. I cannot quite account for the omission of Political Economy from the B. A. Examination, nor for the meagre provision therein made for Moral Philosophy and

* Appendix E. † Appendix F

Logic. The local Senates, I trust, are to be empowered finally to adjust these standards, otherwise some of them appear to be inadequate.

58. It has been suggested that some means might be adopted for expressing in the title of a Bachelor of Arts the branch, if any, in which he has graduated with Honors. It is certainly true, that whereas the great object in ordinary Pass Examinations must be to fix and maintain a general level of merit, in the Honor Examination the object is to measure the special height to which individuals can rise in a particular study.

59. There should, I think, be a power in the University to confer occasional honorary Degrees (without Examination) upon distinguished authors and men of genius when such may appear.

60. I may notice in conclusion, that on perusing Mr. Lumsden's Minute, I became aware that the last Draft Report of the Sub-Committee of Arts differs from that which I had before perused. The original Draft proposed to dispense with "the principle of affiliation." The present Draft proposes to retain it. My own view on this point is expressed in para. 11 of a former Minute, and remains unchanged. Indeed, although I can quite understand why many persons are in favor of affiliation, even in this country, and why others are opposed to it altogether, I cannot quite understand what is signified by affiliation in the present Draft of this Report. Is it to be an affiliation without selection, and consequently without responsibility on the part of the parent? Is it to be an adoption of all and sundry, of every College or School, large or small, public or private, provided only it may be called respectable? Surely this is altogether inconsistent. This unrestricted application of a restrictive principle has no doubt been forced upon the Committee by a consideration of the difficulties to which any limitations would give rise. But for this very reason I would suggest, and strongly urge, that it will be better at once to abandon a system which, as they evidently perceive, cannot here be enforced in its integrity.

(Signed) ELPHINSTONE.

The 9th November 1855.

No. 77.

FROM

THE SECRETARY TO THE GOVERNMENT OF BENGAL,

TO

W. G. YOUNG, ESQUIRE,

Secretary to the Calcutta University Committee.

Dated Fort William, the 22nd January 1856.

GENERAL EDUCATION.

SIR,

I AM directed by the Lieutenant-Governor to acknowlege the receipt of your letter dated the 10th of July last, submitting copies of printed Reports of the Sub-Committees appointed for the purpose of framing Drafts of Rules for Examination

for the grant of Academical Degrees and Honors for the Calcutta University, and for other cognate matters in the Faculties of Arts, Medicine, Law, and Civil Engineering.

2. In reply, I am desired to forward for the information of the University Committee a copy of a letter* from the Director of Public Instruction, enclosing the replies of Officers connected with the Presidency, Hooghly and Medical Colleges, who were invited to state their opinions on the Reports of the University Sub-Committees.

* No. 1692, dated 16th October 1855.

3. After the careful consideration which the subject has received from the very competent persons who form the University Committee, the Lieutenant-Governor feels little disposed to obtrude any remarks of his own, being confident that the determinations to which the Committee will arrive on the papers before them will, on the whole, be the most judicious that could be adopted.

4. The only point on which, with much diffidence, he would offer an observation, opposed to the views of the Sub-Committee of Arts, is with regard to the Entrance Examination. He was not prepared to find an Entrance Examination proposed as part of the plan. The notion which His Honor had formed of the intended University was that of a body constituted for the purpose of examining and giving Degrees for proficiency in certain stated branches of knowledge, leaving candidates to acquire that knowledge wherever they might think best; and as it is not proposed or intended that the University shall *teach*, but only *examine* candidates for Degrees and Honors, the Lieutenant-Governor is still inclined to think that the Entrance Examination is unnecessary. He apprehends also, that, as applied to students at various distant Institutions, who cannot assemble at one place to be examined, it will prove very difficult in practice, and not very satisfactory; and as applied to students of various classes, and belonging to Schools of various kinds and under various systems of support and management, the proposed plan may, he thinks, tend to undermine the general popularity of the University.

5. In other respects, the Lieutenant Governor, I am directed to state, has nothing to add to the remarks of the Director of Public Instruction, with which he entirely agrees.

I have the honor to be,

SIR,

Your most obedient Servant,

W. GREY,

Secretary to the Government of Bengal.

No. 1692.

FROM

THE DIRECTOR OF PUBLIC INSTRUCTION,

TO

W. GREY, ESQUIRE,
Secretary to the Government of Bengal.

Fort William, 16th October 1855.

SIR,

WITH reference to Mr. Under-Secretary Morris's communication, No. 296, dated 26th July last, I have the honor to forward for the Lieutenant-Governor's consideration the original papers noted in the margin, which contain the opinions of Officers connected with the Presidency, Hooghly and Medical Colleges on the Reports of the University Sub-Committees.

No. 69, dated 7th September 1855, from the Principal, Presidency College.
No. 146, dated 4th August 1855, from the Principal, Hooghly College.
No. 3798, dated 29th September 1855, from the Offg. Secretary, Medical College.

2. The Rules proposed for the Faculty of Arts are generally approved by the Officers consulted; but the Professors of the Presidency College make a few suggestions, which I think are worthy of consideration. They suggest that the Examinations in languages should not be confined to two authors in each language, but should extend to several authors or works. I concur in this view, as I think that a better test will thus be afforded of the candidate's general knowledge of the language and of his ability to turn it to practical use in after life. I would leave it to the Senate to select beforehand such portions of the works of the authors prescribed as may appear expedient, and I would not limit them to "one subject in Prose and one in Poetry." I am also disposed to agree with the Presidency College Professors in thinking that Solid Geometry, Calculus of Finite Differences, and the Theory of Probability, might for the present be omitted from the list of Mathematical subjects for the Honor Examination.

3. I observe, that Oordoo is not included in the list of languages appended to the Rules relating to the Entrance and Bachelor's Degree Examinations, yet it would appear from what is said at para. 7 of the Sub-Committee's Report, that it is intended to allow candidates to be examined in the language. I would suggest that Oordoo be specifically mentioned in the Rules, and that the authors or works in which the Examination is to be held be indicated, as in the case of other languages.

4. The scheme of the Sub-Committee of Law appears to me to be well adapted for its purpose, and to call for no special remark. I presume that a fee will be levied in this as in the other Departments, from each candidate coming up for Examination.

5. The Council of the Medical College object to the limitation of the period of study for Medical Students to four years, but I think they have in this respect misapprehended the proposal of the Sub-Committee of Medicine. Four years is indicated as the *minimum* period of study, but there is nothing to prevent those who find this time insufficient from coming up for Examination for a Degree, after five or more years of study. With regard to the suggestion contained in Dr. Macnamara's letter of the 29th ultimo, No. 3798, I would observe that, as the test for the lower Degree includes an Examination in Surgery and requires certificates of surgical practice, this Degree may

be regarded as one for Surgery as well as Medicine, and it can hardly therefore be said that the Sub-Committee's scheme "contemplates no Degree in Surgery."

6. I think it doubtful whether Scholarships and Exhibitions should be conferred by the University. If (as may be presumed) it is intended that they should be tenable only on condition of due progress being made by the holder, it must rest, I imagine, with some other authority, and not with the Senate, to ensure and judge of this progress. Inconvenience may possibly result from its resting with one authority to grant a reward, and with another and an independent authority to sanction its being retained.

7. There is only one point in the scheme of the Sub-Committee of Civil Engineering to which I would wish to call the Lieutenant-Governor's attention. Looking at the object with which this Faculty is to be established, I am inclined to think, that to insist upon every Bachelor of Civil Engineering being also a Bachelor of Arts, will be to require more than is necessary, and if the course of study in the Colleges intended for Civil Engineers is to be limited to two years, more than can reasonably be expected of the students of those Colleges.

I have the honor to be, &c.,
(Signed) W. GORDON YOUNG,
Director of Public Instruction.

No. 69.

To

W. GORDON YOUNG, ESQUIRE,
Director of Public Instruction.

SIR,

I HAVE the honor to reply to your letter, No. 1157, dated 30th July last, forwarding the Reports of the University Sub-Committees of Arts and Law.

Report of the Sub-Committee of Arts.

The Report of the Sub-Committee of Arts has had the most attentive consideration of myself and the Professors, and the suggestions which are now submitted for your consideration are the result of the various discussions we have had on the subject. The plan which the Sub-Committee proposed appears generally to be unexceptionable, but having regard to the present state of Educational Institutions in India, some modification of the course of study prescribed for the Degrees of B. A. and M. A. is, I think, desirable.

B A Examination.

At page 6 of the Report, it is proposed, that one subject in Prose and another in Poetry shall be selected by the Senate two years previous to the Examination, from certain standard authors, and that the Examination in languages shall be limited to these. I think it would be a better plan to extend the Examination over portions of the works of several authors, instead of confining it to two. There are no means of ascertaining from the Reports the extent of historical knowledge which the Sub-Committee would require. The Histories of England, India, Greece and Rome are specified, but whether such a knowledge only will

be required as can be acquired from elementary works, such as Keightley's and Pinnock's, does not appear. If so, I think that the standard in English ought to be considerably raised.

M A. Examination.

The Sub-Committee evidently do not intend that the standard for Honors shall be attainable in four years by any but students of the greatest ability and application, and agreeing, as I do, with the principle on which the course for Honors has been drawn up. I nevertheless think that it has been carried somewhat too far. The amount of historical reading which will be required, is not definitely stated, but assuming that candidates would be required to possess a general knowledge of Ancient and Modern History, I think the standard for Honors in languages has been fixed too high.

The Sub-Committee have adopted the standard of the London University for Honors in Mathematics, and were the students of the two Universities placed on a like footing, I should have no objection to offer; but regarding as I do the standard laid down as absolutely unattainable by any student in India at the present time, I would recommend the omission of Solid Geometry, Calculus of Finite Difference, and the Theory of Probability, from the Course.

Report of the Sub-Committee of Law.

The Senior Professor of Law being absent on sick leave, I am unable to furnish you with his opinions on the Course of Law which the Sub-Committee recommend The Junior Professor is of opinion that the Course prescribed is admirably adapted for imparting a sound legal education.

The Report of the Sub-Committee of Law is herewith returned.

I have the honor to be, &c.,
(Signed) J. SUTCLIFFE,
Principal, Presidency College.

Presidency College,
The 7th September 1855.

No. 146.

FROM

THE PRINCIPAL OF THE COLLEGE OF MOHOMED MOHSIN,

TO

W. G. YOUNG, ESQUIRE,
Director of Public Instruction,
Fort William.

Dated Hooghly, the 4th August 1855.

SIR,

I HAVE the honor to acknowledge the receipt of the plan forwarded with your letter of the 30th ultimo, for conferring University Degrees in Arts and Law upon students in India. You desire me to report upon the plan with reference to its applicability to this part of India, and more particularly with reference to the state of education in the Mofussil.

I believe generally, that the plan is applicable to those parts of the Mofussil, where, as at Hooghly, Education has made considerable progress. I believe that any plan for

conferring Degrees, which is applicable to Institutions in Calcutta, is equally applicable to those at Hooghly. The students here have for the last ten years competed at the Annual Examinations along with those in Calcutta. They have been examined upon the same questions, and have not usually been much behind in the contest. Disturbing causes may, at particular times, (as was the case last year,) occasion failure; but Education is so widely diffused in the District, and the desire to obtain it is so real, and likely to be so permanent, as to offer good grounds for hoping, that when the system comes into operation, a large number of our students will be found qualified for competing for the Degree of B. A. in Arts, according to the standard of qualification proposed by the Sub-Committee.

If it be thought, that we have not a large enough staff of Professors to teach all the branches of learning required for the Degree of B. A.,—that we have, for example, no lecturer on Chemistry who can illustrate his lectures by experiments,—this want may be supplied. Lectures on Chemistry, experimental lectures, would not require to be given more than twice a week, and with our proximity to Calcutta, and the facilities for travelling afforded by the Rail, the same person who lectures to the students of the Presidency College would be able to give lectures once or twice a week to the students of this College.

The same provision might be made for affording instruction in Law, and we should then be able to send up students to compete for Degrees in this Department also.

After reading over the remarks of the Sub-Committee, I am inclined to prefer the title of B. A. to denote a Graduate in Arts to that of G. A.

I beg leave to add a few words on what is called the "Entrance Examination," which seems to me to be the most faulty part of the Sub-Committee's Scheme. The Sub-Committee propose that there should be an Entrance Examination of all who intend, four years subsequently, to be candidates for the Degree of B. A., and that this Entrance Examination should be conducted by one body of Examiners for *all* the "affiliated" Institutions.

I am inclined to go along with the opinion expressed by the Government of Madras, and to think that a general Entrance Examination should be dispensed with, at least it should be dispensed with in all Institutions not directly under the control of Government. Let the conductors of each Institution examine candidates for admission to their own Institution, without the intervention of a general Examining Committee.

The first objection to general Entrance Examination is the enormous amount of labor it will bring upon the examiners, without any corresponding advantage. The Annual Entrance Examination in this College alone (which is conducted by the Officers of the Institution) is as much as the Examiners can get through in eight or ten days. What, then, will the labor be when all the "affiliated" Institutions are examined together.

Secondly, it will be very unpalatable to the conductors of the large Missionary and other private Institutions. The conductors of such Institutions will not like to be fettered in this manner. They will wish to admit to the benefits of education whomsoever they

please, leaving it for future circumstances to determine whether the student will be qualified to compete for a University Degree or not. If this condition of a general Entrance Examination be retained, the consequence will be that most of these Institutions will stand aloof, and what is regarded as a means of "affiliation" will prove a means of "segregation."

I do not think much pains need be taken, or much anxiety felt, to prevent students from entering on a useful course of study. It is more desirable to tempt and invite them, for something will be gained even if they miss the Degree.

The important fact to be ascertained is the state of the student's mind at the termination of his scholastic career. If he proves at the final Examination, that he possesses those acquirements that are deemed necessary for gaining a Degree, it is scarcely worth while to require that the result shall have been preceded by a general Entrance Examination, or that the period between the two Examinations shall have been exactly four years.

I have, &c.,
(Signed) J. KERR,
Principal.

No. 3798.

FROM

THE OFFG. SECRETARY, MEDICAL COLLEGE,

TO

W. GORDON YOUNG, ESQUIRE,
Director of Public Instruction,
Fort William.

Dated 29th September 1855.

SIR,

IN reply to your letter, No. 1414, dated 5th September 1855, I have the honor, by direction of the College Council, to forward a Report upon the scheme for granting Degrees in the Calcutta University to the Medical Students.

2. I am further directed to point out, that the Report of the Sub-Committee of Medicine contemplates no Degree in Surgery, and to state that the College Council are strongly of opinion, and beg therefore to suggest, that a Diploma in Surgery, as well as in Medicine, should be given to the successful candidates in the Pass Examination for the lower Degree, in order that the Graduates in Medicine of the Calcutta University may be recognized in Europe and elsewhere, not only as such, but also as Graduates in Surgery.

I have the honor to be, &c.,
(Signed) F. N. MACNAMARA,
Officiating Secretary.

The printed Report is herewith returned as requested.

(Signed) F. N. M.,
Officiating Secretary.

REPORT OF THE COLLEGE COUNCIL ON A SCHEME FOR GRANTING DEGREES IN MEDICINE IN THE UNIVERSITY OF CALCUTTA, AS CONTAINED IN THE REPORT OF THE SUB-COMMITTEE OF MEDICINE.

1. THE College Council propose the following additions and alterations in the Scheme alluded to, (the paragraphs in the accompanying copy of the Report of the Sub Committee of Medicine have been numbered for readier reference) :—

"*Paragraph* 2. The College Council are of opinion that the term of four years is not sufficient to enable students to acquire an adequate theoretical and practical knowledge of the Medical profession for independent practice."

2. The past experience of the Bengal Medical College is opposed to the limitation of four years' study. Up to 1844, the period of four years was allowed for pupils to qualify themselves for obtaing the Diploma of the College, but after that year the time required was extended to five years. "The period of four years heretofore allowed for all pupils to qualify themselves for admission to the Service as Sub-Assistant Surgeon, or for obtaining the College Certificate of qualification, having been deemed too limited to admit of their acquiring the requisite amount of practical knowledge for independent practice, it was recommended by the Council of Education to be increased to five complete Sessions, which has been ordered by Government to be carried into effect from the next Annual Examination" (*General Report of Public Instruction for* 1843-44, *page* 67,) and this is the rule at the present day. The experience of the Council since 1844 has fully confirmed the propriety of the alteration, and they consider that the present system works well, and that it would be inexpedient to change it.

3. The Regulations of the London University require that no candidate should be admitted to the first Examination for M. B., before he has completed his nineteenth year, nor to the Second Examination within two academic years of the time of his passing his First Examination. The student thus arrives at his twenty-first year before he obtains the Degree of M B.

4. The College Council are of opinion, that the same limitation as to age for admission to the First and Second Examinations for M. B. in the University of London should be enforced in the Calcutta University ; and as it has been deemed advisable, after mature deliberation, to admit students to the Medical College at the age of sixteen, five years of study must necessarily be spent in that Institution before they can obtain the Degree of M B.

5. According to the Scheme of the Sub-Committee of Medicine, the First Examination would take place at the age of eighteen, after two years' study, and the Second Examination at the age of twenty. The Council are convinced, that the students of the Medical College could not pass the First Examination at the age of eighteen, after only two years of study, and this opinion is founded on the experience of the Members of the Council, whose lectures are addressed to the students of the first, second and third years.

6 Further, it may be remarked, that it would be very undesirable, and very unusual, to grant Degrees in Medicine, which qualified for independent practice at the age of twenty years To show what is the general feeling of the profession in England on this

point, the following paragraph may be quoted from Sir John Forbes's proposed "Bill for regulating the Medical Profession," printed in the *Lancet* for the 8th July 1854, page 14 :—

"No candidate shall be deemed eligible for Examination by any of the Medical Examination Boards hereafter mentioned, who shall not produce satisfactory evidence that he has completed his twenty-second year, and that subsequently to the completion of his seventeenth year, he has passed at least four years in some Medical School or Schools approved by the Medical Council."

7. *Paragraph* 4. The College Council do not consider it desirable to retain the title of Graduate for the lower Degree. The term Graduate implies no fixed standard of qualification, and is applicable to various grades or degrees of proficiency, which may be high or low. It is a title which is not known in the sense in which it is proposed to employ it here at any other University, and would therefore be unintelligible out of India. On the other hand, the title of M. B. has a defined signification as to qualification, and is well known and generally recognized. As, moreover, the proposed tests of proficiency, and other qualifications for the lower Degree in the University of Calcutta, are equal in extent and importance to those required of candidates for the Degree of M. B. in European Universities, there is no valid reason why the title should be withheld from the Indian student

The College Council are strengthened in their opinion by the argument employed in the Report of the Sub-Committee of Arts with reference to the adoption of the term Bachelor of Arts, rather than that of Graduate of Arts, and which is as follows :—

"Although the former of these is non-descriptive, and to that extent objectionable, yet a designation so familiar, and of such well and widely-understood conventional meaning as that of B. A., would be far more acceptable to the Graduates and to the public in general than any other that could be substituted for it, and there seems no sufficient reason for denying to the Indian student a coveted verbal distinction of this nature, if the proficiency by which he earns it be on the whole as high, and the Examination by which that proficiency is tested be as strict, as those by which the same distinction is obtained in the Universities of the United Kingdom and other parts of the civilized world. It seems also undesirable, and in some degree inconsistent with the object of founding Universities in India, to adopt for the first and principal academical distinction a title which may be held to imply intellectual disparity between those who attain that distinction in India and those upon whom it is conferred in other parts of the British Empire."

8. *Paragraph* 13.—For "four years" substitute "five years."

9. *Paragraph* 18.—For "eighteenth year" substitute "nineteenth year."

10. *Paragraph* 19.—For "two academic years" substitute "three academic years."

11. *Paragraph* 20.—For "General Anatomy and Physiology, one Course," substitute "General Anatomy and Physiology, two Courses."

12. *Paragraph* 21.—For "two Winter Terms" substitute "three Winter Terms."

13. *Paragraph* 25.—Substitute for the word "Anatomy" the words "Descriptive and Surgical Anatomy," and for the words "Physiology" insert the words "General Anatomy and Physiology."

The proposed alterations are more explanatory than the original terms, which are indefinite.

14. *Paragraph* 26.—For the entire paragraph substitute the following words:—"The Examinations in these subjects shall be written, oral, and practical." The subject of Physiology admits of Examination by practical test, as well as the other subjects enumerated.

15 *Paragraph* 40.—For "General Anatomy and Physiology" substitute "Comparative Anatomy and Physiology."

The alteration here proposed would be more in accordance with the Second Examination, which includes questions in Comparative Anatomy.

16. *Paragraph* 45.—For "two months" substitute "three months"

17. *Paragraph* 48.—After the word "Surgery" add "(including Diseases of the Eye)"

18. *Paragraph* 59.—After the word "Medicine" add "(including General Pathology and Hygiene,)" and after the word "Surgery" add "(including Diseases of the Eye.)"

19. *Paragraph* 67.—Instead of the words "a case of Midwifery Instruments" substitute the following:—

"A Microscope of the value of 100 Rupees, or Books of the same value."

20. *Paragraph* 75.—After the words "Intellectual Philosophy" introduce the word "Logic."

21. *Paragraph* 76.—After the words "Moral Philosophy" insert the word "Logic"

Logic is introduced here in accordance with the Regulations of the University of London.

There is perhaps no branch of human knowledge in which some acquaintance with the principles and rules of Logic is more needed than in that of Medicine.

By order,

(Signed) F. N. MACNAMARA,

Officiating Secretary.

APPENDIX A.

I HAVE carefully perused the papers of the Acting Principal and the Professors of the Grant Medical College on the proposed standard of Medical Education for the new University, and I shall proceed to record my opinion on the subject, from which it will appear wherein I agree with these gentlemen or otherwise.

2. It appears to be the desire of the Honorable the Court of Directors, that this standard should approach as near that of the London University as circumstances will admit; and there is no doubt but this standard, laid down by men of the greatest ability and matured experience, is especially adapted for testing the qualifications of candidates for the highest honors, and is admirably adapted to the present state of Medical Science and Education in Great Britain. But it must be borne in mind, that the University of London is but a late Institution, and that its system of Medical Education was particularly framed for the wants of the profession in England at a time when, by a singular anomaly, the highest Medical honors were only conferred by those bodies who did not profess to give the requisite means for their attainment; and the great majority of those in the Medical Schools who aspired to academical honors were obliged to seek for them in Scotland or in Ireland. The institution of the London University opened up the means, not only of obtaining the best Medical Education, but also the highest honors. Again, it must be remembered, that these honors are purely academical, and confer no licence to practise the profession, but are merely testimonials of the highest attainments. The bulk of the profession in England are licensed by other corporate bodies, who have framed Rules to prevent any one practising the profession who have not undergone a requisite education, and been pronounced qualified by appropriate Examination. It was never contemplated, that even the majority of this class should seek to obtain the highest honors in the University, although they were patent to all.

3. I have thought it necessary to premise so much to show, that in fixing the standard of Medical Education in the University here, that of the London University must be modified in applying it to the wants and circumstances of the profession in this country at the present time; and while it is put in the power of all to obtain the highest Medical honors, it is not necessary to consider that in this country, more than in England, every member of the profession should possess them—in short, that some grade must be kept in view, equivalent in reality, though it need not be in name, to the general practitioner in England, to meet the wants of the country.

4. It appears by the Governor General's letter to the Senatus of the Bengal University, that two Degrees are to be granted, and we may assume that these Degrees will carry with them the Science to practise. The first Degree, we may also assume, whatever its title, will be taken by the bulk of the profession, and the standard to qualify for this, after preliminary examination, should be simply such as to ensure by examination a thorough and practical knowledge of the profession in all its branches. The second Degree will be aspired to by those who have ability and means and inclination to prosecute the study of their profession.

5. In fixing the standard of qualification for the first Degree, I conceive that it is especially necessary to have reference to "the probable capabilities" of the candidates, and the prospect of obtaining a reasonable number of applicants, as is represented in Mr. Peet's

paper. In reference to the practical effect of this, I would quote from the Report of the Principal of the Grant Medical College in 1853-54, as showing the working of that College since its institution :—"It is well known," says Dr. Morehead, "that the leading idea in the mind of the distinguished founder of this College was to give to the people of Western India a practically and well-trained body of Medical practitioners, who, by the skilful and conscientious exercise of their art, would so recommend themselves to their countrymen, as in time to take place of the Hakeems and Waids, who, from the want of adequate education, must necessarily be incompetent to exercise the healing art with safety and success;" and a little further on he states, "there can be no avoiding the conclusion that the object Sir Robert Grant had in view has, as regards the populous town of Bombay, been in the short space of four years achieved." This happy achievement, however, is not, it is to be hoped, to be confined to Bombay, but will be gradually extended all over the Presidency, and now, in the enlightened intentions of the Honorable Court of Directors to extend education throughout the Province, there cannot be a doubt but in the course of time candidates for Medical Education will flock to the Presidency to obtain the licence to practise the profession in their native towns—thus the object now accomplished in Bombay will be also effected there. If the standard for the first Degree be raised, as Mr. Impey proposes, it is probable that it may prove beyond the capabilities of the candidates, and "seriously interfere with the probability of obtaining a reasonable number of applicants."

6. It appears, therefore, that it is not necessary or expedient to make the standard for obtaining this Degree higher than the Regulations of the Grant College require for the present "Graduation." The preliminary examination, at present in force for admission of students into the College, should be strictly carried out; it is little less comprehensive than that of "Matriculation" in the London University, the examination in Greek and Latin Classics excepted. This, of course, will not be applicable here, but instead, a thorough knowledge of the English and Vernacular languages should be insisted on. The course of study required by the Regulations is not professionally inferior to that required by the London University for the Degree of M. B., and in some respects it is more practical, in as much as clinical instruction is more insisted on. I would propose then, that the first Degree of the new University shall be obtained, *first*, by the existing preliminary examination at the Grant College strictly enforced in all its branches, which may be called "Matriculation;" *secondly*, by a course of study similar to that laid down by the Regulations of the Grant College for the present graduation; and *thirdly*, by examinations (the manner of which to be settled by the Senatus), so as to ensure a practical and theoretical knowledge of the profession in all its branches. The title of the first Degree may be *Licentiate in Medicine*, to qualify for the practice of the Medical profession in all parts of India.

7. We now proceed to consider the standard from the highest Degree of Medicine Doctor, the qualifications for which can scarcely be fixed too high, and should not be lower than that of the London University. But, before proceeding further, I would suggest the institution of an academical honor to be gained by completion, which I humbly conceive might be followed by the happiest effects It has been a matter of remark by the talented Principal of the Grant College, in an introductory lecture in 1853, that "further study of the profession, after obtaining graduation, has not been pursued, or thought necessary by those who have passed the Colleges of India," and every thing that will encourage this continued study ought to be embraced in the system of Medical Education in the new University. I am afraid that, considering the means of the young men who study the Medical Profession, it cannot be expected that many will continue that study within the walls of the University after obtaining the first Degree, unless they have external aid. To afford this, it would be most desirable that two or more Fellowships be instituted, to be granted yearly to those who most distinguish themselves in passing for the Degree of Licentiate. It should be imperative

that these Fellowships be held only by those students who had previously obtained a Degree in Arts, and to all who have thus obtained that honor, the curriculum should be abridged to four instead of five years to qualify for examination. These Fellowships should be held for two years, during which the holder would have time to prosecute his studies previous to examination for the Degree of M. D., and at the same time be useful in assisting the Professors, in tutorial work. Thus two great ends would be obtained, encouragement to continue study, and valuable assistance to the Professors, as well as to the Students in general. I need scarcely remark that the system of Fellowships and Tutors in the English Universities aids greatly both Professors and Students, and that the want of these in the Scottish Universities is much felt and complained of. The provision for these Fellowships need not be much higher than the present Scholarships, perhaps Rupees 40 or 50 a month; and whether this be made by the State, or founded as the Scholarships now are, may be matter for after consideration.

8. To proceed with the standard and qualifications for the second Degree of M. D., those should be admitted for examination who—

1*st*,—Have obtained a Fellowship and continued their studies afterwards in Medicine, Surgery and Midwifery for two years.

2*ndly*,—Licentiates, who have obtained a Degree in Arts and have continued their studies in Medicine, Surgery and Midwifery, including Clinical Instructions in these branches for two years within the University.

3*rdly*,—Licentiates who have been employed in the practice of their profession for three years and who have a Degree in Arts.

All candidates to be examined in Medicine, Surgery and Midwifery by examiners appointed by the Senatus, and to furnish a commentary on a case in either of these at their option. Those who have been employed in practice, and who may not have been able to attend lectures, besides examination as above specified, with the commentary to produce and defend a thesis, as proposed by Dr. Giraud—all graduates of the Grant College passed previously to the institution of the University, to be admitted to examination after three years, employed in the practice of their profession, without the obligation of attending lectures or having previously a Degree in Arts.

9. I have made no allusion in the above remarks to the standard of Medical Education in the University of Edinburgh, although its fame, as a seat of Medical learning, since the days of Cullen, and the numbers that have gone forth from it to practise and attain the highst eminence in the profession, might demand consideration in mooting the present question; but as that of the London University is desired to be the model standard, I shall not further remark, than that of the University of the Scottish Metropolis is not higher, with the exception of its being required to write and defend a thesis, than what is now proposed for the Degree of Licentiate in the University here; and this, I submit, is a strong argument that it need not necessarily be higher, to produce the most desirable results.

(Signed) J. DON, M. D.

THE scheme of Medical Education laid down in the Draft Report of the Sub-Committee, of the Calcutta University is substantially so much the same as that which I proposed in my

remarks on the Minutes of the Acting Principal and Professors of the Grant Medical College, that little comment is further necessary ; yet there are a few points in principle, and in the detail, where the difference may call for remark.

2. The more important points are the difference in the number of courses of lectures prescribed and the period of attendance on Clinical Instructions and the practice of a Hospital to qualify for graduation, and in the qualifications laid down for the obtainment of the Degree of M. D.

The courses prescribed to qualify stand thus :—

		Report of the Sub-Committee.	*Regulations of the Grant College.*
1.	General Anatomy and Physiology,	Two courses, ..	Three courses of Anatomy and two of Physiology.
2.	Medicine, ...	Two ditto, ..	Three of Medicine and two of Clinical ditto.
3.	Surgery, ...	Two ditto, ..	Three of Surgery and two of Clinical ditto.
4.	Midwifery, ...	One ditto, ..	Two courses.
5.	Medical Jurisprudence	One ditto, ..	Two courses.
6.	Dissection, ...	One ditto, (winter,)	Three courses.

The number of years prescribed in the Draft Report of attendance to qualify for graduation is four. This is also acknowledged in the Regulations of the Grant College, but the shorter period has been discouraged, and five years have been the period of attendance before final examination.

3. As uniformity is so necessary to be observed in the Ind an Universities, the number of courses of lectures on Medicine, Surgery and Medical Jurisprudence might be curtailed, without seriously affecting the proficiency of the candidates for graduation ; but in all the other courses, in my humble opinion, it would be most desirable to continue the present Regulation of the Grant College, more especially as regards the system of Clinical Instruction, the attendance on Hospital practice, and in dissections. My own convictions are strong on these points, but I may be permitted to quote the opinion of a high authority, which will bear with it greater weight than any thing I can adduce.

In the Annual Report of the Grant Medical College for 1853-54, Dr. Morehead, in describing the course of Medical Education pursued, and more particularly the system of Clinical Instruction, observes—" It cannot be too frequently inculcated that the mind may be stored with facts of Chemistry, Anatomy, Physiology, and Materia Medica, and yet be a perfect blank as regards that kind of knowledge which fits for the safe practice of the art of healing. This fitness can be only acquired by actual patient continuous observation of disease and the action of remedies at the bedside of the sick, and applying there, in proper place and order, the necessary facts, previously acquired, of the elementary branches of Medical Science which have just been named. It is to this that the term ' Clinical Instruction' has been applied, and upon the manner in which this is conducted, the usefulness and efficiency of a Medical School will mainly depend." I might quote much more from this Report bearing on the subject, but this will sufficiently show the great importance attached to this branch of Medical Education. Indeed, he took an opportunity of strongly expressing his opinions in almost every Annual Report of the College.

I fully concur in all he has recorded, and hence I would impressively submit that the period of attendance on Clinical Instruction and Hospital Practice should not be lessened in the Regulation of the Bombay University.

4. With respect to the qualifications for the Degree of M. D., I have in my remarks stated that a Degree in Arts should, in my opinion, be necessary to qualify for examination; I still think it would be highly desirable for reasons therein stated; but again, to preserve uniformity, this might be waived in anticipation of a time, not far distant it is to be hoped when the standard for the highest honors may be raised as education advances, and the possession of General Scholarship may and will be more readily attainable by all.

5. With respect, to the Scholarships proposed to be given to candidates after the first and second examinations, I would observe that, as there are now several instituted by private contribution, for the especial use of the Grant Medical College, it would be hard to deprive students of the right of competing for a Government Scholarship (who had previously obtained one of those,) by the rule proposed that no single candidate shall be permitted to hold more than one Scholarship at the same time. I would, therefore, submit that the possession of a Grant College Scholarship should not disqualify for competing for a Government one.

6. In my former remarks I took occasion to propose the institution of Honorary Fellowships, the holder of which is to be available as Tutors in assisting the Professors in minor points of detail. The University Medical Scholarships in the Draft Report are essentially the same, but it is not provided that they should act as Tutors. I still think that this would be a highly desirable function for the holders of Scholarships to perform, and that the scheme would work well in two ways on the Teachers and the taught. The holder of the Scholarships having to convey instruction to others, would feel it incumbent upon him to exert himself to acquire the full extent of professional knowledge he is called upon to impart. Thus, while he improves himself, the pupils would have all the advantage of his improvement, and the Tutors would always be more accessible for reference by the pupils than a Professor can possibly be. The Tutors might be useful, moreover, to the Professors in assisting in Examinations, in the Dissecting Room, in the Laboratory, and in many other ways.

7. In conclusion, I would beg again to refer to the subject of Clinical Instruction. It appears to me, that it would not be incompatible with the Rules of the University, if that of one year's attendance should be carried, to authorize the system at present pursued in the Grant College to continue by a Bye-Law. This Institution being only a School for Professional Education, of which there may hereafter be more in the Presidency, they might consistently regulate such matters by Bye-Laws, provided the curriculum were not less comprehensive, and that it exacted all required by the Regulations of the University. Surely it might require more, without deranging the uniformity of the Universities.

I propose this with diffidence, not knowing whether such an arrangement could be sanctioned by authority, but *in the* event of one year's attendance on Clinical Instruction and Hospital Practice becoming the rule of the University, I see no other way of the present system of the Grant College, so esentially necessary to a proper Medical Education, being carried on, and my anxiety to preserve it has caused this suggestion.

(Signed) J. DON, M. D.

BOMBAY,
The 31*st August* 1855.

APPENDIX B.

I HAVE read with much attention the Draft Report of the Sub-Committee of Medicine, formed for the purpose of framing Rules for the Calcutta University.

2. Upon the general question of the applicability of the Regulations of the University of London to the present state of Medical Education in this Presidency, it may not perhaps be expected that I should express my opinion.

3. But if the Rules of the Sub-Committee, founded upon these Regulations, are to be extended to Bombay, I would venture to express my belief that, in one essential particular, they will be found ill-suited to ensure that amount of proficiency necessary to qualify the Native young men of this Presidency for independent practice.

4 The defect to which I particularly refer is the small amount of practical instruction in a Hospital required for the Degree of Graduate of Medicine.

5. The period of Hospital attendance, laid down by the Sub-Committee, for acquiring a practical knowledge of the Medical Profession, is one year in Medicine and one year in Surgery. No provision is made rendering it imperative that students should have filled the office of Clinical Clerk and Surgical Dresser.

6. Whatever opinion may be entertained by the Medical Authorities in Europe, as to the adequacy of this period of practical instruction, an experience of more than seven years, as a Clinical Teacher, warrants the expression of my full conviction, that it will be found altogether insufficient to qualify the Native youths of this country to practise Medicine with benefit to their fellow-countrymen.

7. Looking at the small amount of preliminary training, at the very imperfect development of the powers of observation, at the tendency to inaccurate habits of reasoning from cause to effect, by which the bulk of our students of Medicine are characterized, it is, I would venture to say, scarcely reasonable to suppose that an amount of practical instruction sufficient to qualify European students will also be found adequate to qualify the young men of this country. Nor should the difference in the preliminary practical training of students in England and in India be lost sight of. Few, if any young men, commence their attendance upon the Hospitals in London, who have not had some previous instruction in the practical branches of their profession, by having served an apprenticeship, either to a Practitioner of Medicine, or to some Provincial Hospital.

8. In the Grant Medical College, the comparatively unfavorable position of Native students, adverted to in the preceding paragraphs, has been fully kept in view. By the Regulations of this College, no student can present himself for examination, unless he has attended the Clinical, Medical, and Surgical practice of the Hospital, each for a period of twenty months, and there is no instance of any student having passed his examination, until after thirty months of such attendance, during which period not less than eighteen months have been spent in the performance of the duties of a Clinical Clerk and Surgical Dresser.

9 The experience of my colleagues will, I venture to say, bear me out in the assertion, that a shorter course of Clinical Instruction would have been insufficient to ensure that practical proficiency, without which the practice of Medicine is as likely to inflict injury as to confer benefit upon those amongst whom it is established.

10. To reduce therefore the period of Hospital attendance in Medicine and Surgery respectively, from thirty months to twelve months, will strike at the very root of Professional Education, and if carried out will, in my judgment, place in the utmost jeopardy the success of the Medical Profession in this Presidency.

11. I am quite aware that the knowledge of candidates may be to some extent tested by examination, and it seems to me that the standard fixed by the Sub-Committee is all that can be desired; but it must be quite evident that a categorical examination, however ably conducted, is not in itself a sufficient guarantee of fitness, for were it so, no prescribed course of study would be requisite. I do not, therefore, think a rigid and strict examination will compensate for a defective course of instruction.

12. I would further observe, that the comparatively limited means of Clinical Instruction in this country is a point which should be held in remembrance in fixing the period of Hospital attendance.

13. The Jamsetjee Jeejeebhoy Hospital, the field of practical instruction for the students of the Grant Medical College, is probably scarcely exceeded in size, or in the number of admissions into it, by any other Hospital in India; still it would not bear comparison as regards its means of Clinical Instruction with the larger Hospital in London.

14. Under these circumstances, I am desirous of recording my opinion, and I do so with much earnestness and anxiety, that no period of Hospital attendance, short of two whole Sessions, twenty months on the Medical and twenty months on the Surgical Practice, should be deemed sufficient to qualify a student to present himself for examination as to his fitness to practise Medicine and Surgery, and further that such period should include nine months in the Office of Clinical Clerk, nine in that of Surgical Dresser.

15. The Sub-Committee propose, in accordance with the practice of the London University, that a graduate of an Indian University may, after having been engaged for four years in practice, be admitted for examination for the Degree of Doctor of Medicine, or in other words, that a person who has attended for twelve months upon the Medical and twelve months upon the Surgical Practice of a Hospital, and who has been subsequently in practice for four years, shall be deemed qualified to undergo the examination for the highest Degree the University can confer.

16. I would submit that there is no parallel between European and Native students as to the advantages they may respectively be expected to derive from independent practice and self-cultivation, subsequently to their removal from College.

17. We have as yet no evidence, that the graduates of the Indian Colleges may not retrogade after their emancipation from collegiate discipline, and should this be so, we shall have the somewhat remarkable phenomenon of a class of persons possessed of the highest Degree, who are inferior in their qualifications to those upon whom the lower Degree has alone been conferred.

18. In no case, therefore, in my opinion, should private practice alone be held to qualify for the highest Degree; I would render a further attendance upon Hospital Practice and a further cause of Clinical Instruction imperative.

(Signed) JOHN PEET,
Acting Principal, Grant Medical College.

BOMBAY,
The 5th September 1855.

APPENDIX C.

No. 6933 OF 1855.

FROM

MAJOR GENERAL WADDINGTON, C. B.,
Chief Engineer of Public Works,

TO

C. J. ERSKINE, ESQUIRE,
Director of Public Instruction.

Bombay, 23*rd July* 1855.

PUBLIC WORKS DEPARTMENT.

SIR,

WITH reference to your note, without date, expressing your wish that I should obtain the opinions of those professional gentlemen to whom I might think it most desirable to refer on the subject of the qualifications for taking University Degrees in Civil Engineering, as contemplated in 7th para. of Mr. Secretary Beadon's letter of 27th January last, I have the honor to transmit the accompanying copies of my letter to Lieutenant-Colonels Scott and Turner, Major Crawford, and Mr. Berkley, with the replies which I received from them.

2. Civil Engineering has a wide scope, and has not been clearly defined by any of those Gentlemen who have now favored us with their opinion. Lieutenant-Colonel Turner enumerates some of those subjects which in England are not considered to be comprised in Civil Engineering, but does not tell us what the latter is considered to comprehend.

3. Major Crawford gives a concise but clear description of what he would consider sufficient in this country to entitle to the lower Degree, and the same qualifications carried to more perfection would give a claim to the higher Degree in his view of the matter, but he limits his statement with the reservation, "that no course of study alone in School can ever "afford grounds for granting a diploma to any student as a qualified Engineer. At the utmost, "certificates of the amount and nature only of the student's attainments could be granted." He doubts however whether "with an established University, men who have received their "education in it, might not, in after years, when their merits were generally acknowledged, "obtain from their University Degrees of Honor which would give them a special status in "society and their profession" Lieutenant-Colonel Turner also "deems it undesirable to give "the highest Degree until that practical knowledge has been attained," which can be got only "by being actually engaged for some years in the practice of the profession." He elsewhere mentions "five years of creditable practice" as the term which he would propose. Lieutenant-Colonel Turner describes fully the course of study in which a greater or less proficiency should be required to entitle to the lower Degree.

4 Mr. Berkley, premising that "the synopsis of those Civil Engineering courses of "study, which it would be advisable to institute in the proposed Indian University, would be "best drawn up by the Professor who may be appointed to superintend them," and that he "knows of no existing College where Degrees have been conferred specially for attainments "in Civil Engineering," adds that the two Degrees which I had designated (those of Master and Doctor) seem to him to be suitable in every respect, and that he also concurs with me in the characteristic by which I would have them distinguished, *viz* "the one conveying a "distinguished recognition of ability to practice, the other of qualification to teach the art."

5. Mr Berkley then enumerates the qualifications which he considers requisite for the Degree of Master, and also for the higher Degree of Doctor. In the latter he includes an extensive practical knowledge of all branches of the profession.

6. Lieutenant-Colonel Scott sees great objections to granting University Degrees for Civil Engineering; he gives reasons for thinking that no "useful distinction could be drawn between "a Mathematical and Civil Engineering Degree, even as respects the theoretical branch of the "subject" He deplores the distinction drawn between practical and theoretical men, and thinks "the tendency of granting Degrees for theoretical knowledge would be to make the "line of distinction between the theoretical and practical man very marked indeed, and would "therefore be mischievous."

7. Captain Marriott, who has favored me with his opinion on the subject, says—"It seems "to me that the difficulty noted by Lieutenant-Colonel Scott of making any practical distinction "between the principles of Civil Engineering and of Pure and Mixed Mathematics, with refer-"ence to qualifications for University Degrees therein, is insuperable by other means than the "adoption of certain books as containing the standard doctrine on the subject. I fear that "satisfactory treatises could not be found.

"University Degrees cannot be accorded for practical ability (excepting as a *spontaneous* "recognition of notorious excellence which is an exceptional case), nor can they, under any "circumstances, be a guarantee for excellence in practice. Ordinarily, they can be given only "for perfect apprehension of a certain amount of orthodox doctrine on the subject, and can "never be a guarantee for more. A Degree in Civil Engineering must become what a Degree "in Theology, Medicine, Law, or Music is—a witness for knowledge of doctrine; and evidently, "in whatever subject an University accords such Degrees, there must be some doctrine recog-"nized as true, and some works recognized as at least provisionally orthodox and selected as "text-books.

"My own impression is that the whole question resolves itself into, whether it be practi-"cable at present to obtain books, taking a sufficiently comprehensive range, which contain "distinctively professional doctrine, generally recognized as authoritative. I suppose it to be "impracticable.

"Engineering consists in the judicious application, other Sciences, especially Mathematics, "to certain purposes. Degrees may be given in Sciences: they cannot ordinarily be given for "judgment and ability in the use of them. It appears to me that Engineering is not so "distinct a Science, but that Degrees therein must be virtually Degrees in Mathematics pure "and mixed, and it would be better to call such Degrees by the more appropriate names."

8. In the view taken by Captain Marriott, that Engineering is not so distinct a Science, but that Degrees therein must be virtually Degrees in Mathematics pure and mixed, I cannot coincide. *All* Sciences not only depend more or less directly on Mathematics, but are many of them so blended with them as to form constituent parts thereof. Geometry and Mechanics for instance, which are not Pure Mathematics, but the application of Mathematics to natural phenomena, (the laws of extension and motion), Astronomy, Physics, Chemistry, the Phenomena of life, and even of society, are closely connected with Mathematics. At the same time Captain Marriott is right perhaps (not abstractedly however, but practically) when he says that an University Degree can only be "a witness for knowledge of doctrine." I admit it may be inconvenient to make it any thing else. It cannot be made to testify to practical ability without some considerable difficulties, but I do not see the impossibility of well-qualified examiners forming a judgement on that point and certifying accordingly.

I have the honor to be, &c.

(Signed) C WADDINGTON, *Major General,*
Chief Engineer of Public Works.

No. 6000 of 1855.

From

Major General C. WADDINGTON, C. B.,
Chief Engineer of Public Works,

To

Lieutenant-Colonel W. SCOTT,
Engineers.

Public Works Department.

Bombay, 18*th June* 1855.

Sir,

Mr. Erskine, the Director of Public Instruction, has requested me to obtain the opinions of those professional gentlemen to whom I may think it most desirable to refer on the subject of the qualifications for taking University Degrees in Civil Engineering, as contemplated in the 7th para. of Mr. Secretary Beadon's letter of the 26th January last, addressed to the Committee appointed to prepare a scheme for the establishment of Universities in the Presidency Towns of Calcutta, Madras and Bombay.

Para. 7. It has been suggested to the Governor General in Council, that there should be two Degrees in each of the subjects embraced in the design of an Indian University, *viz.* Literature, Mathematics, Science, Law, Civil Engineering, and Medicine, and that on the taking of each Degree, the student should have, as in the London University, an opportunity of taking Honors. This suggestion His Lordship desires to leave to the consideration of the Committee, and eventually of the Senate, observing that any one Degree of the very low standard, which seems to be contemplated by the Hon'ble Court, would be of little value. The Governor General in Council also leaves it to the Committee to consider what titles shall be assigned to the several Degrees, but he desires to express doubts of the expediency of adopting in the University of India the nomenclature which has from long usage become peculiar to the Universities of England.

I suppose that the two Degrees, whatever their designation, must be essentially those of Master and Doctor, the one conveying a distinguished recognition of ability to practice, the other of qualification to teach the art.

The Rules of the Dublin University and of the London University, in both of which I believe Degrees are given in Civil Engineering, would probably afford useful guides.

I venture to ask the favor of your considering the subject, and communicating your opinion to me for submission to Mr Erskine and to His Lordship the Governor.

I have the honor to be, &c.,
(Signed) C. WADDINGTON, *Major General,*
Chief Engineer of Public Works.

Similar letters were addressed to Lieutenant-Colonel Turner, Major Crawford, and Mr. Berkley.

From

Lieutenant-Colonel W. SCOTT,
Engineers,

To

Major General C. WADDINGTON, C. B.,
Chief Engineer of Public Works, Bombay.

Poona, 25*th June* 1855.

Public Works Department.

Sir,

With reference to your letter No. 6000, of 18th June 1855, I feel great diffidence in offering an opinion as to the qualifications for taking a University Degree in Civil Engineering, as I have in vain endeavoured to form any conception of the Rules in force in the Universities of London and Dublin, which can meet the difficulties of the case.

2. My idea is, that it is impossible to acquire in a University the kind of knowledge requisite to enable a young man either to practice or teach Civil Engineering. All that he can there learn is the theory of the subject, and I do not know any art in which theory requires so many modifications. Now the true theory of Civil Engineering is based on Pure and Mixed Mathematics, and as well as I can remember the questions given at Cambridge, the final Mathematical Examination there embraces Mixed Mathematics. I would not speak quite positively on this point, but I have a very strong impression, that very many of the questions in the few Cambridge papers I have seen required a very accurate knowledge of Statics and Hydrodynamics.

3. I do not see therefore that any useful distinction could be drawn between a Mathematical and Civil Engineering Degree, even as respects the theoretical branch of the subject.

4. Doubtless a good mathematician stands on more favorable ground than a person who has only a slight knowledge of the subject: but a man with only a moderate share of mathematical acquirements, but a clear sound judgment, capable of tracing effects to their causes, would probably be a better Engineer than the accomplished mathematician, the bent of whose mind would be rather towards abstract truths.

5. There has been a deplorable distinction drawn between practical and theoretical men. Each has much to learn from the other. It seems to me that that distinction is now breaking down. A Stephenson now calls in a Hodgkinson, when the question is one on an untried idea, as the Tubular Bridge.

6. A Barlow is asked to report on Railways. Babbage unites to high mathematical attainments the most eminent skill as a mechanician. The tendency of granting Degrees for theoretical knowledge would be so few as I can see to make the line of distinction between the theoretical and practical man very marked indeed, and would therefore be mischievous.

7. I was not before aware that Degrees were granted in England and Ireland in Civil Engineering, but I apprehend that a Civil Engineer, like an Architect or a Painter, is judged by his works.

8 There may be something approaching to a recognition of merit in the grades in the Institution of Civil Engineers, but those grades are attained when a man has commenced practice, and the main value of the Institution (apart from the collection of useful information) is, that it brings the Junior Engineers in contact with gentlemen who have gained eminence in the profession.

9. I repeat, that I see no practical means of drawing a distinction between high attainments in Pure and Mixed Mathematics and in the theory of Engineering.

10. I imagine, that the scale of attainments may be placed as high as the capacity of the Teacher. The Mahratta Brahmins seem capable of attaining very high eminence in Mathematics.

11. There may be something in the Rules in the London and Dublin Universities which may meet the difficulty of the want of practical instruction. The difficulty might be, perhaps, to some extent met by instruction on large and varied works, in progress in Bombay. I apprehend nothing beyond a more course of experiments could be given; the difference would, however, be far greater than would exist between the education of one Medical man walking the Hospital and actually dissecting and that of another studying from plates and wax figures.

I have the honor to be, &c.,

(Signed) W. SCOTT, *Lieutenant-Colonel,*
Engineers.

No 1582 of 1855.

To

THE CHIEF ENGINEER OF PUBLIC WORKS

PUBLIC WORKS DEPARTMENT.

SIR,

I HAVE the honor to acknowledge the receipt of your letter, No. 6000, of the 18th ultimo, calling for my opinion on the qualifications that ought to be required for Degrees in the University about to be established in Bombay.

2 The Civil Engineer in India is often expected to possess a knowledge of subjects, which in England form separate branches of the profession, if not different professions. The Architect, the Builder, and the Machinist, are there each considered distinct from the Civil Engineer; and even of those who call themselves Civil Engineers, few practise all branches of what is generally termed "Civil Engineering."

3. Many give their principal attention to Railways, others to Hydraulic Works or to Mining, &c., but in India the professional Architect, Builder, or Machinist do not exist, and a Civil Engineer is expected to possess a knowledge, not only of those arts, but also of the varied branches of ordinary Civil Engineering.

4 There are moreover Sciences often not taught to the Civil Engineer, yet of which every Engineer ought to have some knowledge I allude to Chemistry and Geology.

5. Civil Engineering cannot be thoroughly acquired, no matter how great the talent, or how perfect the instruction, without practice. I do not mean without practical instruction, that of course is necessary, but without being actually engaged for some years in the practise of the profession; and I therefore deem it undesirable to give the highest Degree until that practical knowledge has been obtained.

6. Candidates for the Civil Engineer class should pass an examination, before entering it, in the English language, in Arithmetic, and in Pure Mathematics, including—

Algebra.—Conic Sections.
Geometry.—Appendix of Algebra to Geometry.
Mensuration.—Differential and Integral Calculus.
Trigonometry.

During their course of studies in the class, they should be instructed in Mixed Mathematics, including—

Mechanics.
Natural Philosophy.
Nautical Astronomy.
In strength and stress of materials.
„ Building, including { Carpentry / Masonry. / Stone-cutting
„ Architecture.
„ Road-making and Bridge-building.
„ Irrigation and Water Works.
„ Surveying and Levelling.
„ Drawing and Perspective.
„ Designing and Estimating.
„ Machinery, including { Steam Engine. / Locomotive Engine.
„ Railway Engineering.
„ Chemistry.
„ Geology.

7. Of the above, an accurate knowledge of some, and proof of having attended courses of lectures on others, the proficiency to be ascertained by examination, should be required, before granting the first Degree; and I conceive sufficient stimulus to exertion would be afforded if honors were given for high attainments, either in those studies in which proficiency is compulsory, or in those with respect to which attending lectures only would be sufficient to entitle the student to this Degree. The degree of accuracy to be required in each should be clearly defined by those who, having the means of judging by personal examination of the state of Education in Bombay, can best decide what extent of knowledge may fairly be expected

8. The higher the standard, provided that standard can be maintained, the better; it will probably be well to fix the standard somewhat lower at first than it may probably be raised to hereafter.

9. The highest Degree should not, I think, be given until probably five years' creditable practice of the profession after having left the University. Certificates of such practice by some qualified person, with whom the candidate may have been associated, should be required, and such an examination passed as would elicit, that the theoretical knowledge had been kept up, and that ability had been acquired to judge of the qualities of materials to instruct artificers in their manipulation, and to design and estimate the cost of Public Works of all kinds.

10. Quickness, correctness, and neatness in Drawing are very important requirements in the Civil Engineer—the art is also one of general usefulness. I am not aware whether any instruction in it be given in any of the Educational Establishments in Bombay—if it be, it would be well to add to the requirements of candidates for entering the Engineer class some degree of expertness in Drawing.

I have the honor to be, &c,
(Signed) H B. TURNER, *Lieut.-Colonel,*
Superintending Engineer, Scind.

KURRACHEE,
The 4th July 1855.

To

MAJOR GENERAL WADDINGTON, C. B.,
Chief Engineer of Public Works.

SIR,

I HAVE the honor to acknowledge the receipt of your letter No. 6000, of the 18th instant, on the subject of the qualifications to be required of students taking Degrees in the Department of Civil Engineering in the Presidency Universities about to be established.

2. I am not aware what may have been already proposed on this head further than what is to be gathered from extract para. 7 of letter from the Government of India quoted in your letter, but on the understanding that there are to be two Degrees in this branch of study. I cannot conceive that, for the first or lowest Degree, less qualifications could be required than would be included in all its branches, Logarithms, Algebra, Geometry, Plane and Solid Trigonometry, Mensuration, and Conic Sections, together with a good elementary knowledge of Physics and Natural Philosophy.

3. To this must be added a fair proficiency in Plan Drawing, some practice as a Surveyor in the field, and some degree of skill in sketching from nature, would be of advantage.

4. For the superior Degree, special attainments in the higher branches of Mathematics, and a more complete mastery of Physics and Natural Philosophy would, I presume, be sought for.

5. I am not aware of the practice or rules observed in the Dublin or London Universities, to which you allude in para. 3; but the business of a Civil Engineer is so essentially a practical one, that it appears to me, that no course of study alone in School can ever afford grounds for granting a diploma to any student as a qualified Engineer. At the utmost, certificates of the amount and nature only of the student's attainments could be granted, and it would remain with the individual thereafter to show to what purpose he could apply them. I should as soon think of giving a lad, who had passed the Naval School at Portsmouth with credit, both in Navigation and Seamanship, a certificate of being a practical Seaman, before some years passed at Sea had shown how far he had succeeded in applying his theoretical knowledge to the practice of his profession.

6. There are so many things in the duties of a Civil Engineer, which it is impossible to teach in School, that I cannot suppose that any diploma obtained there could go beyond the granting of a certificate of attainments, which alone, however, from a University of established authority, must always give the possessor a certain position on entering on the practice of the profession.

7. Whether, however, with an established University, men who have received their education in it mightnot, in after years, when their merits were generally acknowledged, obtain from their University Degrees of Honor which would give them a special status in society and their profession, is perhaps worth consideration.

I have the honor to be, &c.,
(Signed) J. H. G. CRAWFORD, *Major*,
Engineer.

The 29th June 1855.

FROM

JAMES J. BERKLEY, ESQUIRE,
Chief Resident Engineer,

To

MAJOR GENERAL C. WADDINGTON, C. B.,
Chief Engineer of Public Works.

SIR,

I HAVE the honor to acknowledge the receipt of your letter, No. 6000, dated the 18th instant, in which you have requested me to give you my opinion on the subject of the qualifications for taking University Degrees in Civil Engineering, as contemplated in the 7th para. of Mr. Secretary Beadon's letter of the 26th of January last.

The synopsis of those Civil Engineering courses of study, which it would be advisable to institute in the proposed Indian University, would be best drawn up by the Professor who may be appointed to superintend them. I will therefore confine myself, as a member of the profession, simply to a statement of those subjects in which I think proficiency should be required from students before they could take Honorary Degrees. I knew of no existing College where Degrees have been conferred specially for attainments in Civil Engineering, but the two Degrees, which you have designated, appear to me to be suitable in every respect, and I also concur with you in the characteristics by which you would have them distinguished.

Keeping those distinctions in view, I am of opinion that, for the Degree of Master of Civil Engineering, the following qualifications should be considered requisite :—

1. Proficiency in Mathematics, comprising Plane and Spherical Trigonometry, the Differential and Integral Calculus, and Mechanics.
2. In Natural Philosophy and the Scientific Principles of Civil Engineering.
3. In the principles and use of Engineering Instruments.
4. In the Elements of Chemistry.
5. Ditto ditto of Mineralogy.
6. Ditto ditto of Geology.
7. In Physical Geography.
8. In Civil Engineering Drawing.
9. In Surveying and Levelling.
10. In Designing and Estimating simple Civil Engineering Works.
11. In the practical methods of executing Civil Engineering Works.

All of these subjects would fall within a regular academical routine, except Nos. 3, 8, 9, 10 and 11, for which it would be necessary to appoint a separate Professor.

For the higher Degree of Doctor, I would recommend the requisition of the following more advanced attainments, in addition to those which I have specified for the Master's Degree:—

1. Proficiency in the practical knowledge of Machinery applied to Civil Engineering operations.
2. In the practice of all branches of Civil Engineering, as recorded in Text-Books to be selected.
3. In Designing, Estimating, and Reporting upon selected data.
4. Greater proficiency in Chemistry, Mineralogy, Geology, and Physical Geography.

It may seem that I have fixed rather high standards for the qualifications of Graduates for these Degrees, but it is my impression, that they ought to be so, because the acquisition of Degrees in the Government University will be regarded as equivalent to the highest order of certificates of fitness for the practice of the profession, and will be calculated to give those who take them great advantages in the competition for responsible and lucrative appointments in this country.

I have the honor to be, &c.,
(Signed) J. J. BERKLEY,
Chief Resident Engineer, G. I. P. Railway Company.

BOMBAY;
Railway Office,
The 27th June 1855.

No. 7965 of 1855.

FROM

MAJOR GENERAL C. WADDINGTON, C. B.,
Chief Engineer of Public Works,

To

C. J. ERSKINE, ESQUIRE,
Director of Public Instruction.

Bombay, 25th August 1855.

PUBLIC WORKS DEPARTMENT.

SIR,

WITH reference to my letter, No. 6933, of 23rd July, and its accompaniments, on the subject of Degrees in Civil Engineering, and to the Draft Reports of the Sub-

Committee at Calcutta, on the subject of the Degrees in Arts and in Civil Engineering, which accompanied your note of the 18th, received the day before yesterday, I have little to add to what I have already stated. One or two points however demand notice.

2. Only one Degree is proposed by the Sub-Committee in Civil Engineering, no reason in that case occurs to me in favor of the adoption of the term "Bachelor." The term "Master" is intrinsically appropriate and has a peculiar fitness in relation to the science of Architecture and Engineering. The term has always been applied to distinguish excellence in any Craft, and in that of Building beyond all others.

3. The previous attainment of the Degree of Bachelor of Arts is made a condition of admission as a candidate for a Civil Engineering Degree, and it is suggested as necessary that one of the conditions of the attainment of the Degree of B. A., *viz.*, an academical course of at least four years' duration, should be modified in the case of those who contemplate offering themselves subsequently as candidates for the Degree in Civil Engineering. It seems to me that this confusion of the Rules regarding Degrees in Arts and Civil Engineering would be attended with practical inconvenience.

4. The Sub-Committee of Civil Engineering state, that unless candidates for the Civil Engineering Degrees be allowed to substitute two years spent "in the practice of Civil Engineering" and "in private study of those branches of knowledge required for the Degree of B. A.," for two of the four academical years ordinarily required, "it is feared that the practical "part of the canditate's professional education would be sacrificed to the theoretical, or that "the temptation of immediate remunerative employment would prevent many from extending "their studies into the higher paths of science." Comparing this remark with the subjects of examination which follow, it appears to me that they indicate a too indefinite conception of the nature and object of the Civil Engineering Degree. The two years spent "in the practice of Civil Engineering" are expected to provide "immediate remunerative employment," at least to such an extent as shall prevent the need of remuneration being a temptation to abandon the intention of graduating. This practice must therefore be real, responsible professional practice—not practice selected as ancillary to the theoretical studies, but such remunerative practice as circumstances offer. This is to be carried on simultaneously with the private study of those branches of knowledge required for the Degree of B. A., and with the studies in Mathematics, Natural Philosophy, Architecture and Practical Science, according to the long list, under the head "Subjects of Examination." Without this arrangement, the Sub-Committee fear "that the practical part of the candidate's professional education would be sacrificed to the theoretical;" but it is not to be feared on the other hand, that under these circumstances the theoretical might be sacrified to the practical? Whether, however, this be so or not, the remarks leave me in doubt as to the nature of the Degree as conceived by the Sub-Committee. I believe as stated in my former letter, that it might be found practically inconvenient to make the Degree a witness for more than knowledge of doctrine. The subjects of examination proposed by the Sub-Committee indicate concurrence in this view, but the importance attached to the substitution of the practice of Civil Engineering, for a portion of the ordinary academical course, indicate either a different view of the nature of the Degree, or an inadequate estimate, as it appears to me, of the value of theoretical studies. The theoretical instruction is the only true foundation of the practical. The terms 'sacrifice of the practical to the theoretical" convey no consistent meaning to my mind, unless they mean that the foundation is unnecessarily wide for the super-structure—that the range of scientific study is wider than professional practice demands. If this be the case, the remedy is to narrow the foundation, not to confuse the relations of foundation and super-structure. There are such relations between all Sciences, that a man might spend his life in laying the scientific foundations of his practice, if they be not arbitrarily circumscribed. I am much inclined to

think, that the real use of such a professional Degree as that proposed is, that it should testify the acquisition of an adequate foundation of theory, *i. e.*, of scientific knowledge, and its object should be confined to the prevention of quackery, *i. e.*, of practice without an adequate scientific foundation. The extent of scientific knowledge demanded as a qualification for the Degree should be neither more nor less than is supposed to be sufficient for the object With this view, it may be inferred, that I should regard fears of the practical being sacrificed to the theoretical as unfounded, and the intervention of *responsible* practice in the course of academical study as out of due order, and therefore objectionable.

I have the honor to be, &c.,

(Signed) C. WADDINGTON, *Major General,*
Chief Engineer of Public Works.

APPENDIX D.

In an University, Law should be studied chiefly as a Science, and no one is competent to enter upon it who has not a critical knowledge of the language in which it is to be conveyed, who is not a good grammarian and a trained logician.

In England it takes the best men that Oxford and Cambridge can send up. Years of hard study and constant watchfulness of the practice of the Courts qualify them for professional practice or obtain for them amongst their cotemporaries the reputation of being even fair lawyers.

Nor do men, who bring to the study of the Law a broad and liberal education, and a trained intellect, acquire, under two or three years, a due appreciation of that precision of statement and caution, which are the elements of all sound judicial reasoning.

It takes a young man a long time to learn to distrust his first impressions on *system*, and to acquire the habit and the power of testing them.

It appears to me, therefore, that it is trifling with the subject to allow a native of India, who has graduated in Arts, to take a Degree in Law after one year's further study, or to permit any one who has not previously qualified himself by graduating in Arts to enter upon the study of the Law. Even if the second proposition of the Sub-Committee were adopted of allowing young men to graduate in Law who had not first graduated in Arts, I doubt if any could be found who would have a sufficient knowledge of Grammar and of the English Language to enter upon the study.

But it is in itself positively injurious to the mind to commence a study that requires so much precision of thought, except upon a previous broad foundation. The tendency of the study of any system of Law is undoubtedly to narrow an uncultivated mind, to breed a race of attornies rather than of scentific jurists, or of efficient advocates capable of generalizing upon and illustrating the legal principles applicable to the case in hand, of assisting the Court to its judgment, and reconciling the unsuccessful suitor to the result

The object of the Court of Directors in establishing a Law Degree is mainly to raise up amongst the natives a class of persons competent to fill the judical office in India.

This seems to me to have been quite lost sight of in the plan of the Sub-Committee ; their standard of knowledge for a Degree is even insufficient as a test that the graduate has the acquaintance with the subject which a well-educated gentleman ought to possess. For instance,

one paper on Jurisprudence and three papers on Municipal Law, chiefly with reference to the Hindoo and Mahomedan systems, is to entitle the candidate to a Degree. One would have thought that a general acquaintance with the constitution of the English Government and of the Government under which he is living, a knowledge of the duties of a Justice of the Peace, of the duties of a citizen as exacted and expected by the Law, would have been preferable to any thing to be found in the Hindoo and Mahomedan systems.

The former, a native gentleman, will never acquire out of the University; the latter, so far as his personal interests render it necessary, he undoubtedly will. I think, however, it would be a grave mistake to include in a Law Degree that which, if taught at all, should be a part of the general course of the education of a gentleman.

Knowing, as I do, what a slow and painful process the study of the Law is, and equally conscious how useless for any purpose a mere smattering of it is, I am satisfied that if the Law Degree at the University is to be of any practical value, to have any influence on the judicial or professional members of the Native Community, it must be placed at a much higher standard than the Sub-Committee evidently contemplate, and the examination should be such as no amount of *cramming* will enable the candidate to go through. It should be directed to ascertain his knowledge of Law as a Science, his mental powers as a logician, his powers of reasoning on what he has learnt, and I do not think that a less period than two years (I should prefer three), exclusively devoted to Law studies under a good system, would be sufficient to ascertain whether or not he has made any progress in the acquisition of legal knowledge, and whether he indicates an aptitude for legal reasoning.

To induce young men to give so much time to the study of the Law, it will be necessary to make a Law Degree an indispensable qualification for a Native Magistracy and the higher class of judicial appointments.

But this will not be enough; it will be necessary to tempt the best of the graduates to carry their studies much further, and I think these should be Fellowships for which the graduates should compete, which should last for two or perhaps even three years, at the end of which period a further Degree in Law should be taken, and to those the highest judicial appointments available to the natives of India should be given, beginning with the highly distinguished and taking the graduates in order as they have passed The rejected candidates to be still secured the same class of Judicial or Magisterial appointments that belong to the first Degree in Law.

The examination for the second Degree, whilst involving, as before, a test of the candidate's knowledge of Law as a Science, should now include an acquaintance with it as a practical system, the Civil and Criminal Code of the Mofussil, and proofs of a reasonable amount of attendance on the Courts.

I am thus of opinion, that if legal education is to be anything more than a name, or a somewhat dangerous amusement, the first Degree should be a clear test of the student's knowledge of legal principles and aptitude for legal study.

That there should be no examination for Honors, but graduates should be named in the order of their merit, or, as at Hayleybury, "Distinguished," "Highly Distinguished."

That a second Degree, not to be taken at an earlier period than three years from the first, should be given, and that high rewards in the shape of judicial employment should be held out to those who graduate.

When it is recollected that Barristers and Attornies cannot be admitted to practise until they have been in a state of pupilage for five years, unless they are Graduates of Oxford and Cambridge, in which event the period is reduced to three years, I feel justified in saying that a less period will not be sufficient for the qualification of a native of India for a Degree above contemplated.

After these observations, it will be apparent, that I entirely disagree with the Calcutta Sub-Committee, whose Report is so brief that it is impossible to examine it properly without writing an essay on the subject.

(Signed) W. HOWARD.

APPENDIX E.

To

C. J. ERSKINE, Esquire,
Director of Public Instruction.

Sir,

In accordance with the request of His Lordship the Right Hon'ble the Governor, I have the honor to submit the following ideas which have occurred to me in connection with the Draft Report of the Sub-Committee of Law for the Calcutta University, premising that I consider myself at present only asked to state my views regarding the connection of Law studies with the Bombay University, as distinct from the details of instruction in the Elphinstone College, and the provisions which it may be found expedient to make therein for the encouragement of such studies by the foundation of Scholarships, Annual Prize Essays, &c.

2. Though agreeing upon the whole with most of the observations on the special topics referred to, I feel myself compelled to dissent *in toto* from two leading notions, which are not so much insisted upon in particular paragraphs, but rather seem to me to pervade the whole substance of the Report. These are, first, that a Degree in Law should be something different from the diploma or credentials of the practising Lawyer; and second, that Jurisprudence is something different from a scientific acquaintance with positive Law, and a knowledge of it characteristic rather of the "*speculative*" than of the "*particular*" Lawyer.

3. Being firmly convinced, from a mature consideration of the whole subject of Law Education, that the manifold difficulties which reforming educationists of the present day in the United Kingdom have to encounter in this department, may be all traced to these two fundamental misconceptions, I shall take the liberty of considering these matters at some length.

4. The Capital of the British Empire, undoubtedly the greatest seat of the self-developing growth of Law in the world, until within the last few years, presented to the bewildered foreign jurist the anomalous spectacle of two sets of Educational Institutions existing side by side, I may say in the same street, of which one, the University of London, in connection with its central Colleges, bestowed Degrees and Honors in Law, which conferred upon their holders no right to practise in the Science, to which they may have devoted years of study; and the other, the Inns of Court, which enjoyed the exclusive privilege of admitting individuals into the ranks of an honorable profession, for discharging the duties of which no preliminary test of fitness was enforced, unless the capacity to pay certain fees, and to attend at certain periods of the year, at a certain number of dinners, can in any sense be construed as such.

5. The old Universities of Oxford, Cambridge and Dublin still retain the privilege of authorising persons to practise in the Ecclesiastical and Admiralty Courts; but Doctors in Laws have as *such* no right to be admitted as practitioners into the great legal tribunals of the country, the Courts of Law and Equity. As long as the Universities confine their teaching to the Roman Civil Law and its modern off-shoots, the anomaly was not so apparent, for practitioners in the Courts, where the Laws of England were administered, were all along looked upon as of a distinct profession, from the Romanistic jurists of Doctor's Commons; but when the London University extended the curriculum, so as to embrace the study of *general*, in the room of merely *Roman*, Jurisprudence, and of the whole positive Law of England in all its branches, substantive as well as adjective, then appeared, in a most striking manner, the conflicting pretensions of *Doctors*, who had gained the highest Honors in the University, having no legal status except that of speculative Lawyers, and of *Barristers* who had not necessarily learned any thing, and in most cases but little of Law as a Science, possessing the exclusive privilege of practising as Advocates in the Superior Courts of the Kingdom. The results were two-fold. In the London University itself, it was found impossible to keep up an interest in a study of a practical character, which led to no practical results; and to use the words of one of its own Professors, "Law became among the faculties what the University itself has been said to be among the Universities, the Cinderilla of the Sisterhood." On the other hand, the attention paid to the study of Law in the University of London and elsewhere, throughout the United Kingdom, as in the new Queen's Colleges in Ireland, has forced upon the attention of the Inns of Court the expediency of totally remodelling, or rather re-creating, the system of Law Education. These results are fast tending—they must before long bring about the complete re-union of what have long been so unnaturally divorced—the study of Law as a Science with the practice of Law as an Art.

6. But what abstract philosophical system of Law Education, it may be asked, can meet the peculiar circumstances, the results perhaps more of necessity than of choice, of a country into which the Laws of England have been only partially introduced, in which the great masses of the community are almost wholly guided in their conduct by their own peculiar laws and usages, "and in which justice is administered by Courts having a different origin and following different forms of procedure and courses of practice."

7. I should most respectfully submit, that the bestowal of Honors at the Degree Examinations for proficiency in "*the Law as administered by the Courts of the East India Company*," and "*in the Law as administered in the Supreme Courts*," respectively, and *in Jurisprudence as distinct from both*, and confined (as it would seem to be proposed) to the scientific study of the Roman Civil Law alone, would have the effect of perpetuating the separate existence of such conflicting judicatures, instead of tending to what, I should presume, all reformers have at heart—their final amalgamation under one harmonious, simple and uniform system, the speedy consummation of which is also the expressed intention of the Imperial Parliament.

8. With great diffidence I venture to propose the following outline of a plan which would connect the teaching of Law in the Schools of particular Colleges with a system of Degree Examinations in each local University; and which would, at the same time, meet the increasing demand, both by Government, and also very reasonable by the public, for a better educated, a more trustworthy, and in every sense *a cheaper* class of Native Lawyers as well Advocates as Judges; and which would not in any way tend to perpetuate the present transitive state of Law Procedure, by bestowing the stimulus of scientific teaching upon systems which have no pretensions to a scientific character.

Rules for Degrees in Law.

1*st.* No student shall be admitted as candidate for the Degree of G. L. L. (Graduate in Laws) who shall not have at some time previous taken a Degree in Arts, *or* who shall not have spent at least two years in the General Department of some College recognised by the University before having entered the Law School.

2*nd.* Every candidate must have studied Law for three years, or Six Terms, in some recognised School or Schools of Law, in accordance with the Rules sanctioned for the conduct of such School or Schools.

3*rd.* The possession of a Degree in Law shall not *per se* entitle any person to practise in any Court of Judicature in the country; but on the other hand, every Law Graduate, of unsullied moral character, shall be entitled to demand of the proper Officers of any, or every Court of Judicature, original or appellate, either within the Government in which he may have been born, or in which he may at the time reside, that he be admitted to practise as an Advocate in any such Court, provided he shall have passed a satisfactory examination in the *Law as administered in such Court*—the Committee of Examination for each Court to be appointed by Government in communication with the highest judicial functionaries in such Court.

9. The system already pursued for some time in the Medical Colleges of India afford, I think, the most rational model for a plan of Law Education. Were any person to propose to confer the Degree of M. D. upon any young man who might cram in a few months two or three medical works, (say) *Celsus de Medicina, Carpenter's Physiology,* and the *London Pharmacopœia,* leaving the question of admission to practise the healing art to the discrimination of a Council of Associated Apothecaries, the absurdity of such a proposal would be immediately apparent. Not a whit less unphilosophical, I should submit, would it be to confer a sort of Honorary Degree in Law upon a young man, who may have made up, in perhaps five or six months, enough of Justinian Bentham, and Stephen, to pass him. Moreover, such Honorary Degrees would be liable to misconception by the natives of this country, whose experience hitherto has been perhaps fortunately confined to Medical Diplomas, and who can never understand what our L. L. B.'s and L L. D.'s mean, for which indeed there is every excuse, seeing that we ourselves, who write such letters after our names, cannot well explain their import.

10. I also entertain a very strong opinion against the expediency of conferring Degrees in Law on persons, (no matter of what age) who shall not have attended the lectures or at least passed the Term Examinations of some recognised Professor, or Professors, of Law.

11. The admission of Law Graduates to practise as Advocates need not interfere with such person, or classes of persons, as may prefer adopting, as a means of admission, the systems at present in vogue in the various Courts, as the present mode of examination for *Vakeels* and *Moonsiffs*, and the system of apprenticeship to *Attorneys* of the Supreme Court, or of study in the Chambers of eminent *Barristers.* It must be remembered, however, that the last mentioned is not an essential preliminary for the Degree of Barrister-at-law in the United Kingdom, for which nothing is at present necessary, but attendance for three years at certain courses of lectures; and as there is no reason, provided only the services of competent Professors be secured, why young men in Calcutta, or in Bombay, may not be as well grounded in the principles of Law as young men in London or in Dublin, I should propose that our Law Graduates should, in their professional capacity of Advocates, be deemed in every respect equal in status to their European brethren to attain equality; in other respects, they must rely upon their own talents,

industry and integrity ; but I would venture to predict that superiority will not always be found in company with any particular hue of the skin.

12. I have already proposed, for the sanction of Government, the rough outlines of a scheme of instruction for the Law Department of the Elphinstone College, which appeared, provisionally sanctioned, in the *Government Gazette* of the 21st June, and which will be found at page 12 of the accompanying Report of my Introductory Lecture.

13. I shall here enter somewhat more fully into the details of the plan: *1st year*, PRINCIPLES OF GENERAL JURISPRUDENCE, including—

I. *1st.*—The domain of Law in general, separated from Moral Philosophy on the one side, and from Political Philosophy, including Political Economy and the Principles of Legislation, on the other.

2nd.—Historical sketch of the cultivation of Law as a Science in Europe and in India.

II. A *classification* of the constituent parts of public and of private Law, as regards its *sources* into customary, statutory and judiciary, and with regard to its *substantive* or *adjective* character, into rights, wrongs and remedies.

III. A review of the principal phenomena of the science, as presented *under a variety of aspects and conditions*, in each of the subordinate departments of *Private Substantive Law*, which is usually understood to form the main object of Jurisprudence. These departments are by nearly all the most recent jurists treated of in the following order :—

1st.—*Security*, or universal personal rights, as of life, liberty, reputation, &c.

2nd.—*Rights* of *property* in external things, including the general *nature* and the various kinds of property, and the several *modes* by which it may be acquired *other than* by contract, or by succession (from the dead)

3rd.—*Obligations (ex contractu,)* or primary rights *in personam*, or as affecting independent external persons.

4th.—*The Law of Family*, or concerning the inter-dependent, natural and moral relations of individuals, as far as they affect or modify legal rights ; the "*Law of Domestic Persons*," as understood by Sir Mathew Hale, and by Professor Austin, but not so extensive as, and more defined, than the corresponding "*Jus Personarum*" of the Institutes of Justinian, and including *a.* The institution of *Marriage*, and the consequent mutual relations of husband and wife, and the Laws, written and customary, regarding divorce and widowhood. *b.* The mutual relations of parent and child, together with the analogous quasi-domestic relations of guardian and ward, and the custom of adoption. *c.* Consanguinity, or kindred, chiefly as introductory to the Law of Succession.

5th.—*Succession*, considered under its two-fold aspect of—*a. Inheritance* or Succession by Law, in consequence of the relative rights of kinsmen to succeed, by reason of consanguinity or affinity, and *b. Bequest*, or Succession by Will, in consequence of the absolute right of the testator to bestow his private self-acquired property on whomsoever he pleases.

14. *Parts I. and II.* of this subject of General Jurisprudence ought, I think, to extend over about one-fourth of a course of forty weekly lectures ; the remaining thirty, giving at an average six lectures to each of the subordinate titles of Private Substantive Law above specified.

15. The first two titles, *Security* and the *Law of Property* (without its application to Contracts, Family Law, or Succession) might, I think, be treated of sufficiently fully for all future applications in this general course ; but the remaining would each require, for many reasons here unnecessary to specify, a separate special treatment, based, however, upon their general scientific treatment as so many branches of Jurisprudence.

16. With regard to the English *Law of Real* Property, I do not see what particular application it has to this country, except perhaps from an antiquarian point of view in connection with conveyancing. I should also be inclined to leave the whole subject of *Land Tenures in India* to the Professor of Political Economy, to which branch I think it more properly belongs than to Law.

17. *2nd year*—I have proposed, therefore, that the course in General Jurisprudence of the first year should, as regards the department of *obligations*, be followed on the second year by a scientific study of COMMERCIAL LAW, *National* and *International* ; and it is here only I conceive that *International Law* can have any special or practical application in India ; the other department of International Law, namely, the *Conventional Public Law* of *(European) Nations*, being altogether inapplicable to the relations which subsist between the States of India, or indeed, of Asia, to which Continent I suppose the Indian diplomatist (should such a character ever appear on the political stage) would, for some time at least, confine his operations.

18 The *3rd year* I should devote to a more *special* study of the LAW OF FAMILY, *and of* SUCCESSION, based upon the scientific principles laid down in the course on General Jurisprudence, and entering more fully into the Laws, written and customary, of the *Hindoos* and of the *Mahomedans*, and into the doctrines of *English Equity*, as applicable to the same titles.

19. This plan of three connected courses, each extending over a year, I have marked out for my own share of the work, and I think it would be by far the simplest arrangement to leave subjects so closely connected scientifically to one Professor, giving to a second (and I believe, that *two European* Professors would be quite sufficient, at least for some time to come,) the LAW OF EVIDENCE, *the* CRIMINAL LAW, and the GENERAL PRINCIPLES of PROCEDURE, *Civil and Criminal.*

20. Should the division of labour here proposed for the Law Department of the Elphinstone College be sanctioned by Government, the Examinations for Degrees in Law in the Bombay University should of course be adapted to such arrangements, and I think, upon the whole, that the matter of *setting papers* in particular branches of study, as well as the number of such papers, may be very fairly left as matters of detail to the Senate of each University.

I have the honor to be, &c.,

(Signed) R. T. REID,

Perry Professor of Jurisprudence.

RAMPART ROW ;
Bombay,
The 30th August 1855.

To accompany the Government Letter in the General Department, No. 2530, dated 8th December 1855.

W. HART,

Secretary to Government

APPENDIX F.

SUBSTANCE OF AN INTRODUCTORY LECTURE, CONTAINING SUGGESTIONS REGARDING LAW EDUCATION, BY THE PERRY PROFESSOR OF JURISPRUDENCE IN THE ELPHINSTONE COLLEGE. *(2nd July* 1855.)

THE Perry Professor of Jurisprudence, R. T. Reid, Esq., Barrister-at-Law, formed his first class for the study of Law, on Monday evening, 2nd July, at 5 P. M., in one of the class-rooms of the Elphinstone Institution. There were altogether assembled over a hundred students. Of these twenty-eight are at present senior scholars in the general department of the College, and thirty-nine ex-students of former years, who are privileged to attend free, as having passed through not less than two years of the College course, and qualified for entering as scholars on the studies of the third year. There are also thirty-three other students who have joined the College for the Law-class only, some of whom have formerly been in the general department, and a few who have now for the first time become students in the Institution.

Professor Reid commenced by stating, that he had not prepared any formal prelection on the study of Law. He had, however, devoted much time and attention since his appointment to such questions as—How the class was to be organised ? What objects were to be kept in view in framing a scheme of instruction ? &c. ; and he had to express his thanks to the Principal of the Institution and to the Director of Public Instruction, with whom he had been put in communication by Government, for the readiness with which they had listened to his plans, and for the many useful suggestions which they had given regarding the formation of the class, and the course of study—the result of which was, the Regulations published on the subject in the *Government Gazette* of 21st June last, in obedience to which the class was now assembled.

FIRST.—*Objects to be kept in view in framing a Scheme of Instruction.*

These the Professor consider to be:—1. To contribute towards the production of a better educated and a more trustworthy class of Native Lawyers, as well Advocates as Judges. 2. The diffusion among the community generally of a knowledge of the great leading Principles of Law—those fundamental rules of Justice which ought to govern the mutual dealings of individuals as well in their private capacity among themselves as members of the same community ; as in their public capacity, whether as members of the Government towards each other, and towards the whole body of individuals composing the State, or *vice versâ*, of the latter as subjects towards their governors.

With regard to the first—the formation of a better class of professional lawyers—he was bound to say, that this was the principal object in contemplation of those who had subscribed to the Perry Testimonial, the result of which subscription was the foundation of the Chair, which he considered it a very high honor indeed to be the first to fill : this the correspondence between the Committee and Government, which he had seen at the Secretariat, clearly shows.

Nor was this project of educating a better class of Native Lawyers a new one. So early as 1830, the Court of Directors, in their celebrated and oft-quoted Despatch to the Supreme Government, (which he would call our first Educational Charter,) expressed themselves as follows :—" There is no point of view in which we look with greater interest at the exertions you are now making for the instruction of the Natives, than as being calculated to raise up a body of persons qualified, by their intelligence and morality, for high employments in

the Civil Service of India. As the means of bringing about this most desirable object, we rely chiefly on their becoming, through a familiarity with European literature and science, imbued with the ideas and feelings of civilized Europe, on the general cultivation of their understandings, and *specifically on their instruction in the Principles of Morals and General Jurisprudence.* We wish you to consider this as our deliberate view of the scope and end to which all your endeavours, with respect to the education of the Natives, should refer."

He had heard that Sir Erskine Perry had proposed a Law-class in connection with the Elphinstone Institution some eleven or twelve years ago, soon after his becoming President of the Board of Education; and he believed that the present learned Advocate General, Mr. Howard, at that time signified his readiness to lecture. But the matter was then allowed to drop. A few years after, (in September 1847,) it appeared that Sir Erskine "recorded a Minute at the Board" on the same subject, from which the following extracts were read :—

"It has long been a matter of desire with the Board of Education to institute a Law-class at the Elphinstone Institution. A few considerations suffice to show that the Board has been fixing its attention on no visionary topic, but that a living actual want is pressing itself on those who are concerned in fostering the progress of education in India. At the present moment, the whole of the judicial business at this Presidency, with exceptions too few to be noted,* is brought on in the first instance before Native Judges, and Native Pleaders conduct the business of advocacy in all the Mofussil Courts. But there is no one Institution in the Presidency in which instruction is to be obtained as to the principles or practice of the Law administered in the Mofussil Courts. It is scarcely necessary to observe that *Judges without knowledge of legal principles,* or of the considerations to be attended to when conflicting rights come before them, must frequently decide on mere arbitrary grounds, which they cannot explain to others, and which can rarely satisfy themselves."

* * * * * * * *

"But the experience of the Board of Education is quite sufficient to make it clear, that a Law-class of students, with requisite qualifications, can never be got together, except on one of two conditions: either, *1st,* that they shall receive endowments of from Rupees 15 to Rupees 30 per month; or, *2nd,* that it shall be made a qualification for Government employment in the judicial line; that the legal curriculum above mentioned should be completed with a certificate of proficiency. After discussing these two plans, the practical conclusion arrived at by the Board was, that the formation of the class depended very clearly on the assistance to be afforded by the Government and the Sudder Adawlut; and that the question to be decided was, whether the demand for professionally educated practitioners, and for the higher morality which a more extended education generally engenders, is sufficiently great in the Native Courts of Justice to induce Government to adopt a modification of the Rules by which promotion to the Native Bench is governed. We rejoice to learn that your Lordship's Government having been pleased to lay the above views before the Sudder Adawlut, the learned Judges of that Court have been giving their serious attention to the subject."—*Report of the Board of Education,* 1847-48.

No further steps, however, appeared to have been taken in the matter, until, on the eve of Sir Erskine Perry's departure from India, in November 1852, a subscription was raised to commemorate at the same time his labors, both as an Educationist and as a Judge, by the foundation of a Law Professorship. Since then has appeared the great Education Des-

* The lowest class of Native Judges, *viz.,* Moonsiffs, can only try causes up to Rupees 5,000, but as probably not one cause in two hundred amounts to this sum, they have virtually jurisdiction over all causes.

patch of July 1854, to paragraph 30 of which the learned gentleman would direct their attention, as having an immediate bearing on the subject. It is as follows :—

"*It will be advisable to institute*, in connection with the Universities, Professorships for the purpose of the delivery of Lectures in various branches of learning, for the acquisition of which, at any rate in an advanced degree, facilities do not now exist in other Institutions in India. *Law is the most important of these subjects*; and it will be for you to consider whether, as was proposed in the plan of the Council of Education to which we have before referred, the attendance upon certain Lectures, and the attainment of a *Degree in Law*, may not, for the future, be made a qualification for *Vakeels and Moonsiffs*, instead of, or in addition to, the present system of examination, which must, however, be continued in places not within easy reach of an University."

As to the present education, character, and position of the *Vakeels*, as a class, there could be, he thought, but one opinion. His own knowledge of them was very limited and confined to a few who practised at the Presidency; but he would read some extracts from a Memorial presented to the Court of Directors in 1848 by Mr. Neil Baillie, who knew them well, having himself held the office of Government Pleader in the Sudder Adawlut at Calcutta, where he was also a Solicitor of the Supreme Court :—

"With a very few exceptions, the Pleaders are all Hindus or Mahomedans, and being very far below the English Judges in knowledge as well as station, they have never attained to anything like the independence of the English Bar. Their language in addressing the Courts is that of servants to their masters—not merely exalting the person addressed, but unnecessarily lowering themselves; and though a good deal of this may be ascribed to the idioms of their language and to Native manners, it has, no doubt, had some effect in adding to their degradation in the eyes of the English Judges, by whom they have generally been treated with very little respect. They are subject in all the Courts to arbitrary fines, as passion or caprice may dictate; it may perhaps be said, as some justification of this treatment, that in general they are not deserving of any better. This may be true, but *there is usually action and re-action in such cases*; and if the Native Pleader has continued for nearly sixty years in his present abject state, and almost useless in the administration of justice, *some blame must be ascribed to the Judges*. The skilful head of a department makes it his first business to improve his subordinate officers; and English Barristers, placed in the situation of the Company's Judges, would have soon imparted some of their own character and knowledge to the Pleaders in their Courts. There can be no doubt that the Company's Judges have been too careless of the condition and character of the Native Pleaders, and I believe that this has proceeded in a great measure from imperfect notions of the important part which they might be made to perform in the administration of justice.

"An Indian Pleader of the Company's Courts is both Barrister and Attorney. He is thus the sole organ of communication between the Suitor and Judge, and standing, as it were, at the door of the Courts of Justice, his first duty is to discourage litigation. The extent to which this is done by respectable practitioners in England is greater than is commonly imagined. Every Attorney of character settles more disputes out of Court than he allows to be brought into it. In some instances, the ratio is very great, probably as high as five or six to one in the course of a long life and extensive business.

In India the case is quite different. The Pleader has little influence over his client, and would not dare to exercise it contrary to his inclinations. Suits of all sorts are in consequence multiplied, and the Law being absolutely unfixed, the fullest scope is given to litigiousness. I am much within bounds when I say that, from this cause alone, the *want of a*

body of respectable and influential Pleaders, the number of unjust *claims and unjust defences is more than doubled* in all the Company's Courts."

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"The cause being at issue, it is the Pleader's duty to examine and cross-examine the witnesses. It is well known how effectually this is done in Her Majesty's Courts. In those of the East India Company, it cannot be said to be done at all, that is, for any useful purpose. Hence, chiefly, the frightful amount of perjury, for which they are unhappily notorious. I believe that there is never a Native suit without it, and few which admit of written documents without forgery also. Nothing can be more loose than the practice of all the Company's Courts in matter of evidence. I have no wish to see them adopt the technical rules of the English Law on this subject, which, until recently at least, were unnecessarily strict for the slow progress of an Indian suit, and are still capable of amendment. But some greater attention to the subject of evidence than has been hitherto given to it seems absolutely necessary. At present a corrupt Judge might justify any decision by saying he believed, or disbelieved, the evidence of one of the parties. This is very bad.

"When the case is called on for hearing, the Court is to be informed of the matters in dispute, and the evidence by which they are supported. Much of its time may now be saved by verbal statements of the Pleaders, and by mutual concessions and admissions of points that cannot be properly maintained or denied, and its judgment may be enlightened by their arguments on questions of Law or General Principles of Equity. Nothing of all this is done by the Pleaders of the Company's Courts. The Judge is left to find the facts for himself by a laborious examination of the pleadings and evidence, totally unaided by the Pleaders. If he asks a question of them, it is at the risk of being misled by the answer. Hence it is not the clever men or the good lawyers, if any such there be, that make the best Judges, but the men who can look undaunted at a heavy *nuthy*, or file of proceedings, with a determination of steadily going through the whole from beginning to end; for thus only can an accurate knowledge of the facts be obtained. This is frequently the labor of some days, and the wearied Judge is glad if he can come to some sort of conclusion that will answer the ends of justice, without very nicely discerning whether it be agreeable to some particular principle of equity or not. Hence in a great measure the barrenness of Indian decisions."

Mr. Baillie had made several suggestions with a view to improving the character and efficiency, both of the Vakeels and of the Native Judges, who were generally appointed from amongst them. Amongst others, he proposed that the power given by the Regulations to the Jugdes to fine the Vakeels should be abolished:—fine being a penalty of crime and quite unsuited to petty omissions of duty; and inasmuch as the whole profession felt degraded by a single instance of such kind, honorable men were kept away from it by the fear of what they would consider a personal indignity.

With regard to the second object which he thought should be kept in view in framing a scheme of instruction, he (the Professor) would not dwell upon what was manifest to all present—*the importance of instructing every citizen of a free state in the Principles of the Laws under whose protection and guidance he lived and acted.* He would merely refer to a passage in *Locke's Treatise on Education*, where, after recommending a young man to digest Tully's Offices, Puffendorf and Grotius, "wherein he will be instructed in the natural rights of man, and the originals and foundations of society, and the duties resulting from thence," he adds, that this general part of Civil Law is a study which a gentleman should not barely touch at, but constantly dwell upon and never have done with; and goes on to say, "it would be strange to suppose an English gentleman should be ignorant of the Law of his country: this, whatever

station he is in, is so requisite, that from a Justice of Peace to a Minister of State, I know no place he can fill without it."

SECOND.—*Terms of Admission as Students.*

Students naturally fall into two classes with regard to the *object* of their attendance, namely, 1. *Professional*, consisting of persons already connected, or proposing to connect themselves, in some way with Law as a Profession, such as Vakeels or Candidate Vakeels, and other aspirants for judicial employment in the interior; Articled Clerks of Solicitors of the Supreme Court; also the Assistant Interpreters and Translators of the Supreme and Small Cause Courts; and such other young men in similar appointments as may from time to time be recommended by the Judges of Courts at the Presidency. 2. *Non-professionl* persons who may wish to acquire a general knowledge of the Principles of Law.

The classification, however, in the *Government Gazette*, of persons admissible, had nothing to do with this division of students into Professional and Non-professional It rather referred to a preliminary standard of general knowledge. It had been proposed to admit to the Law-class, first, the present *third and fourth year's scholars and free students*, and such former scholars as had attained the rank of third year's free student before they had left the College; and secondly, *paying students*, who, according to the present rules of the College, can attend one or more classes, according to a fixed scale of fees. The Professor was glad to see among the ex-scholars who had given in their names, many gentlemen already connected with Law as a Profession,—some of whom had entered as free students, and others not being qualified as such, had proposed to pay. He saw his old pupils, Balaji, Nanabhai, and Bairamji, of the Translator's Office, in the Supreme Court; Muckandrau, Keshau, and Cashinath, of the small Cause Court; three Articled Clerks of Solicitors; and several others. Besides Messrs. Narayan Dinanath, Narouzji Furdunji, and Venayak and Wasudev, who held important and responsible posts in the Public Service, had set their juniors the good example by proposing to attend the class. He would consider those three gentlemen, however, more in the light of assessors than of students; and when the Native systems of Law came to be considered, he had no doubt but that their assistance would be found very valuable.

THIRD.—*Course of Study proposed.*

He now came to consider the course of study which had been proposed, and of which a synopsis had been published. The course would extend over three years, and would, if finally sanctioned, be distributed as follows:—

First year.—1. Principles of General Jurisprudence.

2. Principles of the Law of Evidence.

Second year.—1. Commercial Jurisprudence, as exhibiting the purest form of Private Substantive Law, National as well as International.

2. Principles of Criminal Law and the Penal Code.

Third year.—1. The mixed titles of Private Substantive Law, with more special reference to the Hindu and Mahomedan Laws of Family and Succession.

2. Principles of Civil Procedure.

This distribution of subjects over three years must of course, he would remind them, be at present considered merely provisional. The final settling of the course would depend upon the arrangements to be made in connection with the future University.

The first course on the *Principles of General Jurisprudence* would be useful to all classes of students admissible; and the third year's scholars would, he hoped, always go through it as a regular part of their College curriculum, that is, for Degree in Literature and Science when the University came to be established.

At the close of the first year's lectures, he would propose that the connection of the Law School with the studies in the general department would cease; and that thenceforward to the end of the course the teaching be more strictly *Professional*. This however need not prevent many who may not have Law as a Profession directly in view from attending. But it would be well, perhaps, after the first year, to exclude all free students who may fail to obtain a certain per-centage of marks (say as in the general department 40 per cent.) in the special subject of Jurisprudence at the annual examination. Of course, students who had entered free for the first year, and who may not answer in such a way as to secure for them that privilege, might continue for the remaining years attending as paying students.

The Professor expressed a hope that *Law Scholarships* would in time be founded, as well by Government as by private individuals, in order to enable poor but meritorious young men to continue their studies in Law after their College Scholarships had failed them; and also that *prizes in books* might be adjudged at the end of each year, which distinction many, to whom a Scholarship would not be an object, would aspire to.

A course of *three years'* study of Law as a special branch, after the *two years* previously spent in the general department of the College, ought, he was of opinion, if judiciously employed, be sufficient to qualify students who may be desirous of presenting themselves for such a Degree in Law as the Education Despatch proposed should be given by the University. The *Elphinstone Law Graduates* would then soon be found filling honorable and responsible posts, side by side with the *Grant Medical Graduates*.

He was further of opinion, that many persons might find it useful and advantageous to attend some of the special courses, without proposing to go on for the Law Diploma Examination. For instance, young men seeking miscellaneous mercantile employments, such as under Banking and Joint Stock Companies, in Railway Offices, in large mercantile houses, or under Government, as in the Sea Customs, &c., would be much benefited by attending, if it was only for one term, in *Commerical Jurisprudence*. Such was now frequently done in the United Kingdom, and he had before him a work lately published by Smith, Elder and Co., entitled *Manual of the Mercantile Law* of Great Britain and Ireland by *Leoné Levi*, Lecturer in Commercial Law at King's College, London, which work he would propose to put into their hands as a class-book next year. "Time was," says the author of this text-book in his preface, "when Law formed part of the general education of a gentleman; and it is rational that Commercial Law should form one of the most essential elements of the education of the merchant."

Further, with regard to candidates for the Law Diploma, it would no doubt be rendered obligatory upon them to attend in Court for some time (say for at least one year) previous to their admission to the Degree Examination. The best test of such attendance would probably be found to be the student's own note-book, from which he might be required, as part of his examination, to furnish *abstracts of reported cases*, as Medical Students do of their hospital practice.

It might, he thought, be also for future consideration, whether other methods besides that of regular attendance at Court, might not be devised upon the amalgamation and remodelling of the present Supreme and Sudder Courts, for imparting a more practical knowledge of the various branches of the profession: say for instance, that a condition might be annexed to the holding of such *future* offices as those of Public Prosecutor, Poor Man's Advocate, and Government Conveyancer; that, as part of their state duties, they might afford facilities to the poor Law Scholar of seeing the details of his future profession in practice. Such a system in fact at present prevailed to a certain extent in connection with the Grant Medical College. This would not prevent students in better circumstances from giving an *Honorarium* to leading members of the Bar for the privilege of entering their chambers, as in England; but such chamber study should be, as is the case with Barristers in England, *voluntary* not *compulsory*, like the apprenticeship of the Attorneys, which had its origin in feelings of monopoly, and in the restrictions of an illiberal age.

The Professor would lastly remark, that this scheme, by proceeding from generals to particulars, and advancing step by step from year to year, left room for future development, in the event of any such plan being adopted in its entirety; while, on the other hand, should the scheme be never carried beyond the courses proposed for the first year, these latter would be in themselves complete and useful, he trusted, for all classes of students attending.

Of course, in the event of such a scheme being fully carried out, at least *one additional European Professor would be required*, and perhaps *one or two Native Professors* for the indigenous Law systems Under three or four Professors, the Law-class would grow into a *Law Faculty* in which students would go through a regular course of professional training in connection with the Courts, and other public aids, as before proposed

FOURTH.—*Method of Teaching.*

Before concluding, he would probably be expected to say something as to the mode of teaching. This would not be necessary for such as were, or had been already students in the *general department* of the College, where experience had led the Professors "to give a decided preference to text-books and familiar teaching* over formal professorial lecture." These are the words used by the Principal in his Report for 1853, in reference to his teachings in Mental Philosophy; and he (the Professor) did not hesitate to say that his own experience of fourteen years as a Teacher had led him to a similar conclusion. There was, however, one very important exception. "No treaties," says the eloquent Dr. Arnot in the preface to his *Elements of Physics*, "can save a person desiring full information on the subject the necessity of

* "We will suppose a class assembled to commence the term. Each student has been required to furnish himself with a copy of each of the *text-books* used, and must of course be provided with a *note-book*. The first lesson will consist in dictating, with the least possible periphrase, and in a series of rapid and brief notes, all the *points* in a portion of the author which they are about to study—the skeleton of the argument to be filled up by their subsequent reading, together with explanations of all allusions concerning which any difficulty may be anticipated, and whatever of general information, illustration, or direction may appear desirable to facilitate their subsequent study of the author in private. With the assistance of the notes which he thus carries away, the student is now expected to "make up" the portion pointed out, and, at the next meeting of his class for this subject (two days subsequently,) to submit to an examination in it. Previously, however, to this examination, he states (in the class,) for the purpose of having them cleared up, any difficulties which, notwithstanding the preliminary assistance he has received, may have occurred to him; and these all explained, either by a fellow-student or by the Professor, the examination proceeds, and is followed by similar assistance and direction concerning the succeeding portion of the text-book. * * * With respect to the necessary *collateral information*, the students, whenever it is possible, are rather directed when and how to read it for themselves than allowed to waste the short hour which the Professor has to spend with them in taking down long notes upon it; and the continually recurring examinations are so contrived as to test and insure a compliance with the directions thus given. The *object*, in short, constantly kept in view, being to teach the pupil the *art*, and give him the *habit of private study*, and to render the work in the class-room an assistance and an incentive to a much greater amount of work in private; and the *method* adopted being summed up in two phrases—preliminary notes and directions for reading, and subsequent searching examinations both *oral and written*."—*Prof. Green's Report of the Elphinstone Institution for* 1850

attendance on *experimental lectures*, or *demonstrations*. Things that are seen, and felt, and heard, leave on the memory much stronger and more correct impressions, than when the conceptions, are produced merely by verbal description, however vivid." The sagacious Samuel Johnson though not very successful in the scholastic line himself, having only succeeded in bringing together *three pupils*, had very good conceptions of the office of a Teacher, and clearly expresses this distinction in his own massive way :—" People have now-a-days got a strange opinion that *everything should be taught by lectures*. Now, I cannot see that lectures can do so much good as *reading the books from which the lectures are taken*. I know nothing that can be best taught by lectures, except when *experiments* are to be shown ; you may teach *Chemistry* by lectures ; you might teach *making of shoes* by lectures." Another great Schoolmaster, Dr. Parr, shows how much more useful and necessary are *Tutors' Lectures* :— " *The multiplication of books*, the facility of procuring them, and the custom of reading them, may be considered as reasons for the *diminished usefulness of lectures*. The Tutor can interrogate, where perhaps the Lecturer would only dictate ; and therefore, in his intercourse with his learners, he has opportunities for ascertaining their proficiency, correcting their misapprehensions, and relieving their embarrassments." The argument drawn from the multiplication of books had been increased a hundred-fold since these words were written. Dr. Parr died thirty years ago, long before the Bohns, Routledges, and the Chapmans had undertaken to *publish for the million*.

In the Science of Law, it had long been admitted that mere lectures, that is, solemn readings one hour long, were of very little use, even as an auxiliary source of instruction ; and, consequently, in the recent improved system of Law Education introduced by the Council of the Inns of Court in London, the public lectures—of which there are but from six to nine in each term—are invariably accompanied by Tutor's Lectures, when the " *Reader*" having descended from his pulpit, marks out, explains, illustrates, and examines upon certain portions of the received text-books, as will be seen by referring to any prospectus published by the Council during the last two years.*

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* COURSE IN EQUITY JURISPRUDENCE.

The Reader on Equity proposes to give during the ensuing Educational Term a course of *Nine Public Lectures* on the Relief afforded by the Court of Chancery, which depends upon Principles not recognised or applied by Courts of Common Law :—

I. *In Matters of Trust.*—1. On the Creation of Trusts. 2. On the relation between Trustee and Cestui que Trust. 3. On the Qualities of Trust Estates in general. 4. On Trusts for the benefit of Married Women. 5. On Trusts for Charities.

II. *In respect of Penalties and Forfeitures.*—1. The General Doctrine of Equity on this subject. 2. Application of the Doctrine to Mortgages.

III. *In cases of Mistake and Accident.*—1. In Matters of Agreement. 2. In the Execution of Powers. 3. In other instances

In *addition to the Public Lectures*, it is proposed, that *two classes* shall be formed, as during the preceding Terms *for the study of the Principles and Practice* adopted by Courts of Equity ; each class to meet for one hour three times a week.

The *Junior Class* will read *Smith's Manual of Equity Jurisprudence*, commencing with the Chapter on " Express Charitable Trusts ;" Portions of *Fonblanque on Equity* ; The *Act for the Improvement of the Practice and Course of Proceeding in Chancery*, 15 and 16 Vict., c. 86.

The *Senior Class* will read *Story's Commentaries on Equity Jurisprudence*, Vol. II., commencing with the Chapter on " Assignments ;" *White and Tudor's Leading Cases*, Vol. II., commencing with " Woollam *vs.* Hearn ;" *Mitford's Pleading in Chancery*, commencing with the Chapter on Demurrers at the second ground of Demurrer.

Each student will be expected, in the intervals between the meetings of the class, to peruse portions of these and other works pointed out by the Reader, and to be prepared at the ensuing meeting of the class, to answer and discuss questions arising out of the subjects of their reading.

The Reader on Equity will deliver his *Public Lectures* at Lincoln's Inn Hall on Thursday in each week during the Educational Term, commencing at two o'clock p. m., (the first Lecture to be delivered on the 19th January.) The Reader will receive his *Private Classes* on Monday, Wednesday, and Friday evenings in each week, from seven to nine o'clock, in the Bencher's Reading Room at Lincoln's Inn Hall.

By Order of the Council,

(Signed) RICHARD BETHELL. *Chairman.*

Council Chamber, Lincoln's Inn, 21st December 1853.

Such being his views regarding the mode of instruction, he regretted much that his pupils for the ensuing term would have to depend chiefly upon his written lectures, as there were no text-books to be had at present in Bombay. He had compiled a little Manual, which would serve as a basis for seven or eight lessons ; but this would only be *a fifth of the course* they had proposed to go through before Christmas. He did not expect to be able to have printed a second part of the " Elements" immediately ; but he hoped to have it ready sometime before the end of the year. Meanwhile, they should manage with such books as were accessible to them. He had understood that some copies of Dr. Whewell's *Elements of Morality* were available ; they might read the 2nd volume on *Jus* and *Polity* to the end of Chapter XIV., on Punishments in the latter ; but he did not purpose entering at much length, in the present course, on the subject of the latter department—Polity. Such of them also as could procure copies of *Blackstone's Commentaries* might read Book I., Chaps. 1 and 14-17, and Book II., Chaps. 1-2, 13-17, and 23-32 ; or the corresponding Chapters in *Stephen ;* or in any other work of a similar description.

The Professor concluded by explaining to such of the *paying students* as now proposed for the first time to enter the College for the Law-class only, the nature of the training which the *3rd year's scholars*, with whom they were to study Jurisprudence, had already gone through in the general department of the College under three or four European Professors in the following :—

COURSE OF TWO YEARS' STUDY.

First Year.

1.—English Literature : *Poetry*—Richardson's Selections : Rogers, Campbell, Moore, Keats, and Wordsworth (50 columns). *Prose*—Goldsmith's Citizen of the World.

2.—History : Heeren's European States and Colonies, Part I. ; Professor Smyth's Lectures, 1st series, 9—14, 21 ; Guizot's Discoure on the English Revolution ; Schiller's Thirty Years' War.

3.—Political Economy : Mill's Principles, Books I. and II. ; Professor Hancock's Introductory Lecture.

4.—Logic and Mental Philosophy : Whately's Easy Lessons on Reasoning ; Locke's Conduct of the Understanding.

5.—Mathematics and Popular Physics : Trigonometry, and Theory of Equations ; Mechanics.

6.—Natural Sciences : Chemistry (Inorganic).

Second Year.

1.—English Literature : Richardson's Selections : Dryden, Pope, Gray, Collins (70 columns) : Chambers' Cyclopædia ; Essayists and Miscellaneous Writers of 5th and 6th periods.

2.—History : Heeren's States and Colonies, Part II. ; Smyth's Lectures, 1st series, 22—23, 26—29 ; 2nd series, 1—2 ; Macaulay's Essays ; Sir W. Temple, Spanish Succession, Frederic the Great and Lord Chatham. Mignet's French Revolution.

3.—Political Economy: Mill, Books III. and IV.; Professor Green's Three Lectures.

4.—Logic and Mental Philosophy: Locke's Essay, together with Cousin's Critical Review of it (Lectures xv—xxiii)

5.—Mathematics and Popular Physics: Algebraic Geometry; Hydrostatics and Pneumatics

6.—Natural Sciences Organic Chemistry; Geology.

Classification of Students attending the Lectures of the Perry Professor.

	Description.	Marithi-Hindus.	Gujerati-Hindus.	(Gujerati) Parsees.	Portuguese.	East Indian.	Total.
Free to Law Lectures.	1. Normal Scholars in Elphinstone College	2	1	4	..	..	7
	2. Free Scholars of 3rd and 4th years ..	8	1	1	...	..	10
	3 Free Students do. do. ..	4	2	2	..	..	8
	4. Paying Students do. do. ..	1	..	1	1	..	3
	5. Formerly Normal Scholars in College	7	2	17	..	..	26
	6. Do. Students of 3rd year's standing	4	1	8	..	..	13
Paying.	7. Do. do. not of do. do. ...	7	3	2	..	...	12
	8. Do. in School Department, Elphinstone Institution	14	..	2	1	..	17
	9. Students from other Institutions ..	..	..	1	2	1	4
	Total	47	10	38	4	1	100

FURTHER MINUTE BY THE HON'BLE J. G. LUMSDEN, ESQUIRE, DATED THE 20TH NOVEMBER 1855.

I purposely abstain from joining in the discussion of the topics which are so well and so fully considered in the present Minute, and its accompaniments. As I said before, I am not sure that we are expected to offer opinions upon those principles and rules which will be common to the Universities of all three Presidencies, this duty having been delegated to a well-qualified Committee.

Even if wrong in this supposition, I have no objection to offer to the very valuable remarks of our Right Hon'ble President with which I generally coincide, and I would not willingly cause delay by merely repeating the same opinions in other words.

Two exceptions, however, occur to this forbearance I would most strenuously support the position maintained in the first sixteen paras, of his Minute, that the higher Degrees and

Honors of the University should never be conferred upon students of a particular profession who had neglected previously to graduate in Arts.

For if the object of the University be to raise up a body of liberally educated gentlemen, who are to fill the several professions and high Government appointments, and who we mean—as I assume—to be the reformers of their countrymen, and the leaven of that improvement which we hope to work upon the country at large and the mass of its ignorant population, I do not see how this object can be attained (through the medium of the University at least) by any other means.

Let the basis of a liberal education be made an indispensable requisite to the stamp of high distinction, which the University will confer by the grant of a superior Degree in any particular profession, and we then alone may reasonably expect to behold the University subserving the beneficent purposes for which it is to be created.

Secondly, as respects the affiliating system.

It is proposed, I see, by our Right Hon'ble President to reject affiliation altogether.

It may be preferable, and indeed it may possibly be found necessary, to dispense with this part of the general measure for a short period, at least in this Presidency ; for there can really be found here but two or three Educational Institutions at the utmost, which are deserving, from their excellence and character, of being affiliated with an Indian University.

But then comes the question which I confess has always appeared to me the main difficulty in the way of the success which the establishment of Universities might lead us to expect.

From whence are to come the qualified candidates for University Honors ? The present Provincial Schools are notoriously incapable of training up even a boy of the highest talents, so as to qualify him for presentation before a Board of University Examiners, or indeed to do more than we now expect of a common clerk, an office copier of English, the meaning of which is to him in most cases unintelligible.

There is not a School, I firmly believe in the Mofussil, the Poona College excepted, that could impart an education superior to what is given in Schools of the very lowest class at home. It seems then to me to be unquestionable that the first step to success in founding a University is the foundation of a sufficient number of really good and efficient Schools, capable of imparting to those who have the capacity and application to profit by their opportunities, at least as good an education as is to be acquired in the public and in the *best of the private Schools at home.** This I know must be a work of time, but it is a work I think that should be at once commenced upon.

If one such Institution could be created in every Zillah in the Presidency, our object in establishing the University would be materially advanced ; for these Schools to ensure our aim *would and must be affiliated.* It is solely by such a system as it appears to me that we can hope to establish and maintain a National University ; without affiliation we merely dignify with

* Here we require Schools of a higher order than the average class of English Schools. There a boy leaves his School to enter into a society more advanced in intelligence than that which he has left—a society, in fact, to the standard of which he has been working up. Here on the other hand, the boy with his fresh intelligence returns to the darkness of his home and to the bigoted observances of his domestic circle, where, instead of receiving fresh rays of light, the imperfect lights which he has acquired run the greatest risk of being speedily extinguished.

the name of a University or Presidency Board of Examiners, whereas it is as obvious that efficient Educational Establishments, such as I contemplate, must exercise collectively a material influence upon the prosperity of the University with which they would be directly connected, as that the University would re-act upon them. Both would become organized into a single and powerful body, governed directly by the rules and system of the University and indirectly by the Senate, a body so powerful for the spread of Education, that no private establishment could hope to rival or to supersede it. Nevertheless, if the plan of affiliation is for the present to be given up, it will necessarily follow, as it seems to me, that initiatory examinations must be given up too which would dispose of one serious difficulty, *at least* in the present plan.

(Signed) J G. LUMSDEN.

The 20th November 1855.

To accompany the Government letter in the General Department, No. 3580, dated 8th December 1855.

W. HART,
Secretary to Government.

FURTHER MINUTE BY THE HON'BLE A. MALET, ESQUIRE, DATED THE 22ND NOVEMBER 1855.

I DO not wish to add to my remarks of the 14th September last any thing more than the expression of my general concurrence in the views recorded by our Right Hon'ble President.

The 22nd November 1855. (Signed) A MALET.

To accompany the Government letter in the General Department, No. 3580, dated 8th December 1855.

W. HART,
Secretary to Government.

F.

CALCUTTA UNIVERSITY.

SECOND REPORT OF THE SUB-COMMITTEE OF ARTS.

REPORT.

THE Sub-Committee of Arts, at present consisting of the Hon'ble Mr. Grant, Messrs. Beadon, Young and Woodrow, Baboo Ram Gopaul Ghose, Pundit Ishwar Chandra Vidyáságur, the Revs. Dr. Duff and Dr. Kay, the Rev. Messrs. Mullens, Ogilvie and Ewart, and Dr. Mouat, have re-considered the matters referred to them, and submit the following revised Report.

Scheme generally after the model of the London University.

In accordance with the views expressed in paragraph 26 of the Hon'ble Court's Despatch of the 19th July 1854, the Sub-Committee have taken the London University as their model, and last year framed a Scheme of Examinations and Academical Degrees and Honors for the Universities of India, generally following that of the London University, but differing from it in some important points of detail. In revising that Scheme, they have attentively considered the various suggestions forwarded for their guidance from all the Presidencies of India, and have endeavoured to adapt it more completely to the special circumstances under which Indian Education is carried on. In form the Scheme has been framed for the Bengal Presidency, but it can be readily adapted, *mutatis mutandis*, to the Universities of Madras and Bombay.*

Nomenclature.

Opinion of the Government of India.

The Government of India left it to the Committee to consider what titles shall be assigned to the several Degrees; but it expressed doubts of the expediency of adopting in India the nomenclature peculiar to the Universities of England. After looking at the question on all sides, the Sub-Committee consider that, with regard to Degrees, it is on the whole best to retain the old names, as indicating respectively a mental training and an amount of knowledge which will be at once recognized wherever similar titles of honor are bestowed; and this view is generally concurred in by the Authorities who have been consulted.

Entrance instead of Matriculation.

The Sub-Committee prefer the term *Entrance* to the term *Matriculation*, as the title of the first Examination. The latter expression is not sufficiently descriptive, and no useful object is answered by preserving it.

Bachelor of Arts.

Although the title of *Bachelor of Arts* (or B. A.) is non-descriptive, and to that extent objectionable, yet a designation so familiar, and of such well and widely-understood conventional meaning, would be far more acceptable to the Graduates and to the public in general than any other

* To facilitate this adaptation, those parts of the Scheme which may be considered peculiar to the Bengal Presidency are printed in *italics*.

that could be substituted for it; and there seems no sufficient reason for denying to the Indian Student a coveted verbal distinction of this nature, if the proficiency by which he earns it be on the whole as high, and the Examination by which that proficiency is tested be as strict, as those by which the same distinction is obtained in the Universities of the United Kingdom and other parts of the civilized world.

Master of Arts

For the same reasons, and also because the title is eminently descriptive, the Sub-Committee would preserve and adopt the title of *Master of Arts* (M A.) for the second degree.

Affiliation.

Reasons why affiliation should be adopted.

In regard to the mode in which the various Schools of learning should be connected with the University, the Sub-Committee see no valid reason for departing from the plan adopted at the foundation of the London University and continued to the present day. If it were the object of the University merely to ascertain in the Candidate for literary honor the possession of a certain amount of knowledge, without reference to the question whether such knowledge had been attained by a laborious process of continued study, or by the injurious practice of cramming, then it would be sufficient if the Senate were to form itself into a Board of Examiners, and permit all Students, however or wherever instructed, or even, if not regularly educated at all, to receive honors, provided they could pass the prescribed tests. But real training and discipline of mind are not always found in good proportion to the amount of knowledge which a Student has attained; and in such Examinations, offering but one test of mental progress, the most valuable acquirement which College study can secure, *viz.*, the permanent invigoration of the mind by steady and continuous application, and by the wise counsel of competent instructors, would be entirely lost sight of. In the present state of education in India, where good Schools are not numerous beyond the chief towns of each Presidency, and where knowledge is valued almost solely for the sake of the employment to which it may lead, the Sub-Committee think it would be a great error for the University not to employ its influence in establishing correct views of the nature of real education, and in furthering the progress of such education as far as it possibly can. They therefore consider it desirable to limit the privilege of securing degress to Institutions in which an efficient system of education is carried out; and such Institutions they would publicly recognize as constituents of the University. This system of affiliation would, they believe, be found useful in improving existing Institutions, and in leading to the establishment of others. It would hold out an inducement to all to adopt into their curriculum of study those subjects at least in which Candidates for degrees will be examined, and would impose upon those Candidates the necessity of studying in places where a good education is open to them; while other Regulations of the University compel them to carry on their studies, even in such collegiate establishments, for a period of at least three years.

The Sub-Committee suggest that all Institutions, whose curriculum of study is such as would enable their Students, after four years' study, to pass respectably the Examination for the B. A Degree, should be eligible for affiliation to the University. There will be nothing invidious in recognizing the Institutions which can do this, and leaving unnoticed those which cannot so far as the good of the country is bound up in the former, so far will it be promoted by the affiliation proposed. At the same

time, it will not throw any monopoly of education into the hands of a few favored Colleges, seeing that all Schools which adopt the appointed standard, and give the amount of education desired, will be able to attain such honor and position as affiliation gives.

In recommending this system, the Sub-Committee have a special regard to the present wants of India. Hereafter, when the highest benefits of Education are more fully appreciated, when the country is filled with well-instructed Schools, and when the number of Students voluntarily submitting to a long-continued training is greatly increased, it may be needless for the University to consider the general character of the education given, and it may be deemed sufficient for it to test only one of the results of Education, the amount of knowledge which Candidates have attained. Meantime they think that the system of affiliation will be productive of good; and they suggest that the various Senates should proceed to carry it into effect as early as practicable, reserving, as hereafter proposed, a power of dispensing with it in rare and special cases. They suggest also that the Schools accepted by one Indian University should be acknowledged by all, so that students who may be compelled to quit one Presidency for another may be subject to no loss by the change.

Entrance Examination.

Entrance Examination to be retained.

The Sub-Committee think that the appointment of an Entrance Examination will serve several important ends. They deem it a point of much importance that students should be led at an early age to prepare themselves for succeeding at a University Examination and to prove in a public and marked manner their fitness to enter upon the course of study by which they are to qualify themselves for a Degree. Moreover, success at the Entrance Examination is of itself in the nature of a distinction, indicating some progress in learning, and affording a credential of certain value to those whose circumstances may not admit of their carrying on their studies to the point which would entitle them to a Degree. The difficulty of bringing students from the interior to the seat of the University has been provided for by ruling that Examinations for Entrance may be held simultaneously at Calcutta, (or Madras, or Bombay,) and at certain specified places in the interior of the Presidency.

This plan has been tried in Bengal in awarding the Government Scholarships, and that with great success. It is both less expensive and less troublesome than the plan of despatching the Examiners themselves to the chief Schools throughout the Presidency.

Standard of the Entrance Examination

The nature of the Entrance Examination proposed by the Sub-Committee does not in most respects differ very materially from that in force in the London University. They could not fix it lower, because tests for similar honors, though given in different countries, should be, as far as possible, of equal value. In Mathematics, the Sub-Committee propose a somewhat higher standard in consideration of the earlier age at which Mathematical studies are usually commenced in India. It is also intended to require some knowledge of Natural History in the Animal and Vegetable kingdoms. On the other hand, the higher subjects in Natural Philosophy required at the Matriculation Examination in the London University, and also Chemistry, are omitted.

Languages

The great difficulty which the Sub-Committee have had is in fixing the test of admission in languages This difficulty arises from the circumstance, that whereas in England English is the only Vernacular, and Latin, Greek and Hebrew the only classical languages, in the Bengal Presidency alone there are (apart from numerous dialects and aboriginal barbarous tongues) four main Vernacular languages, namely, Urdu, Hindi, Bengali and Burmese, and two classical languages of high philological value, namely, Arabic and Sanskrit, besides the Occidental classics, while English must be regarded in some cases as a classical, in others as a Vernacular language.

English
Greek.
Latin
Hebrew
Arabic
Persian
Sanskrit.
Bengali.
Hindi
Urdu
Burmese.

As respects the Entrance Examination, the Sub-Committee have come to the conclusion, that the plan which is on the whole the best, that is to say, the one least liable to objection, is to require each Candidate to pass in two of the languages noted in the margin, of which English must be one. Under this rule, it is supposed that the Students of the Schools at the Presidency towns and hill sanitary stations, where the Western classics are taught, will usually pass in English and Latin, or in English and Greek, or possibly in English and one of the Indian Vernaculars; ordinary Hindu Students in English and in Bengali, Urdu or Hindi; Hindu Students of the Pundit class in English and Sanskrit; ordinary Mahomedan Students in English and Persian or Urdu, Mahomedans of the Moulavy class in English and Arabic; and Students from the Burmese Provinces in English and Burmese

Honors at Entrance not proposed

The Sub-Committee are unanimous in thinking, that an Examination for Honors at Entrance is quite unnecessary. They are of opinion that the standard of the Entrance Examination papers should be moderately high, so that the being placed by the Examiners in the First Division should be evidence of considerable academical progress at the age of sixteen, the minimum age of admission, but that more than this is not required. And they think that a moderate amount of knowledge in each branch should be sufficient to give candidates a place in the Second Division, and thus enable them to study for the Degrees As the Sub-Committee propose no maximum age of admission, it is necessary that in every certificate there should be inserted the age of the successful candidate, as nearly as it can be ascertained

Bachelor of Arts.

Examination for B A. Degree

It is proposed to admit to the Examination for the B. A Degree, at any Indian University, those who have passed the Entrance Examination at that or any other Indian University, and have prosecuted their studies at any one of the affiliated Institutions for at least three years subsequent to Entrance And it might also be competent to the Senates, in rare and special cases, to admit to this Examination, Students who, though not belonging to an affiliated School, can satisfy the Senate that they have pursued a regular course of study under qualified tuition at least four years subsequent to Entrance, and that they are of good moral character

The Sub-Committee are further of opinion, that during the first three years of the existence of the Universities, the Senates should admit to the Examination for the degree

of B. A any persons who have passed the Entrance Examination, and can produce certificates of good moral character.

Standard of Examination for B A. Degree

The nature of the proposed Examination for the B A. Degree has now to be explained.

Languages

In the subject of Languages, the Sub-Committee have found here, as in the Entrance Examination, their greatest difficulty.

In the London University every candidate for the B A degree is required to possess a knowledge of four languages at least, that is to say, of two classical languages, Latin and Greek, of his own Vernacular language, and of either French or German. The Examination however, strictly speaking, is held only in three languages, two classical and one modern foreign language; the knowledge which the candidates possess of their own Vernacular, English, being evinced by translations and by their answers to the classical papers.

English
Greek
Latin.
Hebrew.
Arabic.
Persian
Sanskrit
Bengali
Hindi
Urdu
Burmese

For a B. A. Degree in India, the Sub-Committee think it sufficient, so far as languages are concerned, that the Candidates, as at Entrance, should be required to pass in at least two of the languages noted in the margin, of which English must be one The Sub-Committee strongly recommend that every candidate should be required to possess a critical knowledge of his own Vernacular language, and that the Examination should be so conducted as to put this knowledge strictly and thoroughly to the test. For the Honor Examination, in the branch of Languages, the Sub Committee would further make it compulsory on every Student to pass in a second classical language, so that, to obtain honors in languages, every Anglo-Indian Student, generally speaking, would undergo an Examination in Latin and Greek, as well as in his own Vernacular, English; every Hindu student in English and Sanskrit, besides his own language; and every Mahomedan student in English and Arabic, as well as in Persian or Urdu. Thus the smallest number of languages which each candidate is required to know will be less by two for a Degree, and less by one for Honors, than at the London University.

Sanskrit and Arabic.

The Sub-Committee have felt some hesitation in proposing to require a knowledge of Sanskrit from Hindu students, and of Arabic from Mahomedans, in addition to a knowledge of English, even for the Honor Examination, not because they doubt the propriety or advantage of the plan, but because it militates against pre-conceived opinion The time however has passed when Sanskrit had to be learned by the antiquated method, according to which it was said to take twenty-five years to master the grammar alone. That language is now actually taught, and Arabic may be taught, on the same simple plan as that on which the learned languages of Europe are taught, and either language may be learned with no greater amount of trouble or difficulty than Latin or Greek. And it seems to the Sub-Committee contrary to the spirit in which the plan of an University should be conceived to grant honors in learning to Students who are not regarded as learned by any persons with whom they came in contact, and especially not by their own countrymen, whose enlightenment is the

chief object of their education. The Sub-Committee fully participate in the Hon'ble Court's desire, that, so far as the direct efforts of the Government are concerned, the higher branches of European knowledge should be communicated to the Natives of this country through the medium of English, but they desire to combine with that principle one no less important in itself and essential to the full development of the other, namely, that those who are instructed in European knowledge through the medium of English should also be instructed in one or other of the learned languages of their own country, as the only means whereby they can communicate their European knowledge, in an acceptable form, whether by translations or by original compositions, to the mass of the people.

Mathematics.

In Mathematics and Natural Philosophy, the standard of the London University has been altered only by introducing the subject of Optics, and slightly modifying the course in Astronomy.

History.

In the department of History, the Sub-Committee have added considerably to the amount required for this Degree in the London University. Its great importance, the ignorance that has so extensively prevailed in India respecting its real nature, character and worth, as well as the great benefits which Native students are likely to derive from a careful study of its best portions, have led the Sub-Committee to give it a prominent place in the Examination. In addition to the usual chief branches of Ancient History, the Sub-Committee have not only added the History of India, but also that of modern Europe ; and have joined with them all the study of the Principles of Historic Evidence.

Moral and Physical Sciences.

The standard for the Mental and Moral Sciences also has been raised above that laid down by the London University by the addition of Mental Philosophy, a study of great importance and of the greatest practical utility to Native students.

The Physical Sciences include Animal Physiology, Physical Geography, and Chemistry, subjects which in the London University are either introduced into the Matriculation Examination or are reserved for Honors.

The Sub-Committee are of opinion that, as in the Entrance Examination, so in the Examination for the B. A. Degree, the standard of the papers should be moderately high, so as to afford, in regard to the candidates placed in the First Division, evidence of considerable academical progress and fitness for the Honor Examination ; but that a moderate amount of knowledge in each branch should suffice to secure the candidates a place in the Second Division, and a Degree.

Books named.

In various parts of the Scheme, the Sub-Committee have thought it useful to name certain books as containing the kind and amount of knowledge for which they look on the subject named. Universities are new in India, and Native Students are very ignorant of the best modes of attaining the knowledge they require. It was thought therefore that a few hints would be of service. The Sub-Committee however do not wish to fetter instructors, who can instruct their Students through the medium of any other books than those which have been named. The selection of standard authors for Honors in Latin, Greek and English, the Sub-Committee propose to leave entirely to the Senates.

Honors.

Honors.

It seems to the Sub-Committee, that there should be five distinct branches of learning in which Honors may be taken by any person who passes the Examination for the B. A. Degree, and is placed by the Examiners in the First Division. These are :—

1. Languages.
2. History.
3. Mathematics and Natural Philosophy.
4. Natural History and the Physical Sciences.
5. The Mental and Moral Sciences.

Each of these branches of Examination they have endeavored to render complete in itself. In adopting that of HISTORY, they have made what they consider a great improvement on the curriculum of the University of London. For the reasons stated, when discussing the tests of the B. A. Degree, the Sub-Committee wish to see encouraged in Indian Schools the wise and correct study of History in general, convinced that, when conducted on sound principles, it is eminently calculated to enlarge the minds of Native Students, and lead them far beyond the contracted sphere in which the thoughts of the people of India have hitherto moved. Apart from its immense practical utility in India, the Sub-Committee also consider the study valuable to every educated mind, and they observe with pleasure that the establishment of a similar separate branch of Honors at Oxford was recommended in the Report of the recent Oxford University Commission.

The branch of LANGUAGES usually connected with History has been rendered complete by itself, by the introduction of Comparative Grammar, the History of English Literature, and the principles of Composition Branches III. and IV. are almost the same as similar branches of Honors in the London University, a few additions having been made in accordance with the modern progress of Science.

From branch V., the MENTAL AND MORAL SCIENCES, they have removed the subjects of *Political Economy* and *Political Philosophy* now included in History, and have supplied their place by Natural Theology and other important topics. In this branch five subjects are compulsory upon all students who choose to seek the Honors it bestows, *viz. Logic, the Philosophy of Rhetoric, Natural Theology, Moral Philosophy and Mental Philosophy.* A sixth must be selected by each Student from the following brief list :—

a. The Philosophy of the Inductive Sciences.

b. The Elements of Jurisprudence.

c. The Philosophy of Education.

d. The Evidences of Revealed Religion, as contained in Butler's Analogy and Paley's Evidences.

In permitting the selection of one of these by the Student himself, the Sub Committee have had regard to the varying circumstances of the Institutions that will be affiliated to the Universities, and the numerous classes of Students which they contain. Thus, in respect to the fourth subject named above, the Sub-Committee have kept in view the numerous collegiate Institutions, attended by East Indian and Native Students, in which various subjects of a religious character occupy a conspicuous place. Those Students who devote their chief attention to Classical or Mathematical studies, to History, or to the Physical Sciences, find the most ample encouragement for their efforts in the first four branches of Honors. But unless some subject of the kind here spoken of is also permitted, the Christian Students, and others who, in addition to the various departments of Mental and Moral Science, give much attention to other topics more directly religious, will find, that in relation to those higher Honors which the University professes to hold out to all, they are placed under a disadvantage. This course appears to accord with the sentiments of the Court of Directors, as expressed in their Education Despatch (para. 29) in the following terms: "The detailed Regulations for the Examination for Degrees should be framed with a due regard for all classes of the affiliated Institutions." "In the competition for Honors the subjects of Examination should be so selected as to include the best portions of the different schemes of study pursued at the affiliated Institutions." The principle of what is here recommended seems to be distinctly recognized also in the Rules of the London University. A voluntary Examination, with a special prize, is appointed, suitable for the numerous Theological students of the University, in the Hebrew of Genesis; the Greek of St. Luke; in Scripture History, in Butler's Analogy, and Paley's Evidences. Some Members of the Sub-Committee were of opinion, that the adoption of such works as Butler and Paley was inconsistent with the statement in the Court's Despatch, that "the Examinations for Degrees will not include any subjects connected with religious belief." But apart from this objection, the Sub-Committee were all but unanimous in considering their adoption as desirable in itself. It is hoped, therefore, that these recommendations will be accepted by the University Committee, be sanctioned by the Government, and ultimately adopted by the various Senates when the Indian Universities are established.

Candidates for Honors must proceed to the Honor Examination immediately after taking the Degree of B. A. in the first class; and it is proposed to exclude from the Honor Examination all those who fail to come up for a Degree Examination within five years from their passing the Entrance Examination.

Every Candidate who obtains Honors in any one or more of these five branches should, in the opinion of the Sub-Committee, be entitled at once to the higher Degree of M. A. without payment of any fee. The papers for the Honor Examination should be of a very high standard in each branch, but the Students should be divided into three classes, those of each class being arranged in order of merit, and the Examination should be so conducted as that a Student of ordinary ability and application should, after a collegiate course of four years, be able to find a place in the Third Class. The Sub-Committee would also recommend that the first Student of the First Class in each branch should receive a Gold Medal and a prize of books to the value of one hundred Rupees, and that the second student of the First Class in each branch should receive a Silver Medal and a prize of books to the value of one hundred Rupees

Master of Arts.

Examination for M. A. degree.

The Sub-Committee proposed to dispense altogether with the special or separate Examination for the Degree of Master of Arts, and to prescribe in its stead, as equivalent, the Examination for Honors at the B. A. Degree. In no case would they confer the M. A. Degree without Examination, but they propose this distinction. They would confer the Degree of M. A. immediately and gratuitously on those who in the same year take Honors in any one or more of the prescribed branches of knowledge at the B A. Degree They would also confer it on payment of a fee upon any person who has passed the B. A. Examination, and who in any subsequent year may pass the Honor Examination in any one of the appointed branches; but they would allow such a student no other honor, however high his position might be on the passed list. In conformity with this view, they propose that in ordinary cases the interval between the Entrance Examination and that for the B. A. Degree shall be four full academical years, that being the period necessary, in the opinion of the Sub Committee, to enable a Student to go through a complete college course, and fit himself thoroughly for the Degree and Honor Examinations

But to this they have allowed an exception. In some instances students intending to prosecute their further studies in Law, Medicine and Civil Engineering may, by special diligence, prepare themselves for the B. A. Degree within there years from their Entrance Examination. The Sub-Committee recommended that they be examined, but even though they pass, the Degree itself should not be conferred upon them till the prescribed period of four years has expired.

Reservation.

It is to be observed, that although all the members of the Sub-Committee agree generally in the views expressed in this Report. yet the conclusions arrived at on several important points are the conclusions of the majority, and each member of the Sub-Committee reserves to himself the liberty of expressing an opinion at variance with those contained in this Report, when the subject comes to be discussed before the Committee at large.

J. P. GRANT.
C. BEADON.
W. G. YOUNG.
F. J. MOUAT.
A. DUFF.
W. KAY.
H. WOODROW.
J. MUILENS.
D EWART
J. OGILVIE.
RAM GOPAUL GHOSE
ISHWAR CHANDRA SHARMA.

CALCUTTA,
June 2nd, 1856.

CALCUTTA UNIVERSITY.

ARTS.

ENTRANCE EXAMINATION.

THE Entrance Examination shall take place once a year, and shall commence on the first *Monday* in *March*.

The chief Examination will be held in *Calcutta*, but Candidates may be examined at any of the under-mentioned places, *viz.*, *Berhampore*, *Dacca*, *Patna*, *Cuttack*, *Benares*, *Agra*, *Delhi*, *Ajmere*, *Lahore*, and any other places hereafter to be appointed by the Senate.

No Candidate shall be admitted to the Entrance Examination, unless he have completed his sixteenth year, but any one above the age of sixteen may be a Candidate, wherever he may have been educated.

Every Candidate must apply either to the Registrar at least fourteen days, or to the *Secretary to the Local Committee of Public Instruction* at any of the places above-mentioned at least two months before the Examination begins ; and, with his application, must produce satisfactory testimony that he is at least sixteen years old and of good moral character. He must also give notice in writing of the languages in which he wishes to be examined.

An Entrance Fee of five Rupees shall be paid by each Candidate, and no Candidate shall be examined, unless he have previously paid this fee, either to the Registrar, or to the *Secretary to the Local Committee* at one of the above-mentioned places. If a Candidate fail to pass the Examination, the fee shall not be returned to him. He may be admitted to any one or more subsequent Entrance Examinations on payment of a like fee of five Rupees on each occasion.

The Examination shall be conducted by means of printed papers, which shall be the same for all places in the interior as for *Calcutta*, and which may include a paper of questions to be asked and answered, and of sentences to be read and explained, orally.

Candidates for Entrance shall be examined in the following subjects :

I. LANGUAGES.

Two of the following Languages, of which English must be one, *viz.* :

English.	Sanskrit.
Greek.	*Bengali.*
Latin.	*Hindi.*
Hebrew.	*Urdu.*
Arabic.	*Burmese.*
Persian.	

Candidates shall be examined in each of the languages in both prose and poetry.; the subjects being selected by the Senate *one year and a half* previous to the Examination from any approved classical of standard works or authors, such as the following :

English.

Pope, Cowper, Scott, Campbell, Addison, Johnson, Goldsmith, Southey, DeFoe.

Greek.

Homer, Xenophon.

Latin.

Virgil, Horace, Sallust, Cæsar, Livy, Cicero.

Hebrew.

Arabic.

Alif Laila, Nafhat al Yaman.

Persian.

Gulistan, Bostan, Yusuf-o-Zulaikha, Akhlah-i-Muhsini, Anvari Suhaili.

Sanskrit.

Raghuvansa, Kumara Sumbhava.

Bengali.

Tota Itihas, Life of Raja Krishna Chundra Roy, Arabian Nigh's, Ramayan.

Hindi.

The Ramayan.

Urdu.

Burmese.

The papers in each language shall include Questions on Grammar and Idiom

Easy sentences in each of the languages in which the Candidate is examined shall be given for translation into the other language.

II. History and Geography.

The Outlines of General History, as contained in Marshman's Brief Survey, or other similar works ; and the Outlines of Indian History as contained in Murray's History of India, or other similar works.

A general knowledge of Geography, and a more detailed knowledge of the Geography of India.

* For Sanskrit, instead of the older Grammars, such works as Ishwar Chandra Sharma's two Grammars, or that of Mr. Williams ; and for Bengali, Rammohun Roy's, Dr. Yates', or Shamachurn Sirkar's Grammar, will be used in the Examination.

III. Mathematics and Natural Philosophy.

Arithmetic and Algebra.

The ordinary Rules of Arithmetic.
Vulgar and Decimal Fractions.
Extraction of the Square-root.
Addition, Subtraction, Multiplication and Division of Algebraical Quantities.
Proportion.
Simple Equations.

Geometry.

The first three books of Euclid.

Mechanics.

Composition and Resolution of Statical Forces.
The simple Mechanical Powers, with the ratio of power to weight in each.
Centre of Gravity.

IV. Natural History.

A general knowledge of the habits and characteristics of vertebrated animals, as described in Patterson's "Zoology for the Use of Schools," or in any similar work

General economy of vegetation and the simple or elementary organs of plants, as contained in the first 46 Sections of "Vegetable Physiology" in Chambers's Course, or in any similar work.

In Branches II. III. and IV the answers may be given in either of the languages in which the Candidate is examined.

The Examinations shall be conducted in the following order, *viz.* :

(To be filled up by the Senate.)

At the close of each day's Examination at any places in the Interior above-mentioned, the answers of each Candidate shall be sealed up by the *Secretary to the Local Committee of Public Instruction*, and forwarded immediately to the Registrar.

Candidates will not be approved by the Examiners, unless they show a competent knowledge of all the subjects in which they are examined.

On the morning of the *fourth Monday* after the Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have

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* Only a popular knowledge of Mechanics is required.

passed, and to every such passed Candidate shall be given a Certificate signed by the Registrar, setting forth his age, and the division assigned him by the Examiners.

Bachelor of Arts.

The Examination for the degree of Bachelor of Arts shall take place once a year, and commence on the *first Monday in April.*

The degree of B A. shall not be conferred on any Candidate within four academical years of the time of his passing the Entrance Examination, but Candidates may be admitted to the Examination for the degree after three years from the time of their passing the Entrance Examination.

No Candidate shall be admitted to this Examination unless he produce satisfactory testimonials from the authorities of one of the Colleges or Schools affiliated to the University (1) of moral character, and (2) of having prosecuted, during the period that has elapsed since his passing the Entrance Examination, a course of study in one of such Institutions.

Every person who has passed the Entrance Examination at either of the Universities of *Madras* or *Bombay*, shall be admitted to the Examination for the degree of B. A. in the *Calcutta* University, provided he shall first satisfy the Registrar that he is of good moral character, and that he has prosecuted, during the period that has elapsed since his passing the Entrance Examination, a regular course of study in one of the Institutions affiliated to either of those Universities.

Applications must be made and certificates forwarded to the Registrar at least *fourteen* days before the Examination begins. Notice in writing must also be given, by the Candidates, of the languages in which they wish to be examined.

The fee for the degree of B. A. shall be twenty-five Rupees. No Candidate shall be admitted to the Examination, unless he have previously paid this fee to the Registrar. If a Candidate fail to pass the Examination, the fee shall not be returned to him. He may be admitted to any one or more subsequent Examinations on payment of a like fee of twenty-five Rupees on each occasion.

The Examination shall be conducted chiefly by means of written or printed papers, but the Examiners may also put *vivâ voce* questions to any Candidate in the subjects in which they are severally appointed to examine.

Candidates for the degree of B. A. shall be examined in the following subjects :

I. Languages.

Two of the following Languages, of which English must be one :

English.	Sanskrit.
Greek.	*Bengali.*
Latin.	*Hindi.*
Hebrew.	*Urdu.*
Arabic	*Burmese.*
Persian.	

Candidates shall be examined in each of the languages in both prose and poetry; the subject being selected by the Senate *two years* previous to the Examination from any approved classical or standard works or authors such as the following:

English.

Milton, Shakespeare, Dryden, Pope, Young, Thomson.
Bacon, Swift, Addison, Johnson, Goldsmith, Burke, Southey, Macaulay.

Greek.

Homer, Sophocles, Euripides, Herodotus, Thucydides, Xenophon, Demosthenes, Plato.

Latin.

Virgil, Horace, Cæsar, Cicero, Livy, Tacitus.

Hebrew.

Arabic.

Alif Lailah, Nafhat al Yaman, Ikhwán al Safa, Soyuti's Taríkh al Kholfa, Taríkh Yamíní.

Persian.

Sekandar Nameh, Gulistan, Dewán of Hafiz, Akhlaq-i-Jaláli (or Nasiri), Dewán of Orfí, Abu-al-Fazl's Letters.

Sanskrit.

Rughuvansa, Kumarusumbhava, Kiratarjuniya, Viracharita, Uttaracharita Mudrarakshasa.

Bengali.

Batrish Singhasan, Purush Parikhya, Betal Panchabingshati, Probodh Chandrika, Mahabharat, Ramayan, Meghaduta, Sakantalá, Annadá Mangal.

Hindi.

Urdu.

Burmese.

The papers in each language shall include Questions on Grammar* and Idiom. Sentences in each language shall be translated into the other.

II. History.

The principles of historic evidence as treated in Isaac Taylor's two works on the subject, or other similar books.

The History of England, (including that of British India,) to the end of 1815.

Elphinstone's History of India.

Ancient History, with special reference to the History of Greece to the death of Alexander, the History of Rome to the death of Augustus, and the History of the Jews.

The Historical Questions will include the Geography of the countries to which they refer.

III. Mathematics and Natural Philosophy.

Arithmetic and Algebra.

The ordinary Rules of Arthmetic.

Vulgar and Decimal Fractions.

Extraction of the Square-root.

Addition, Subtraction, Multiplication and Division of Algebraical Quantities.

Simple and Quadratic Equations, and questions producing them.

Algebraical Proportion and Variation.

Permutations and Combinations.

Arithmetical and Geometrical Progression.

Binomial Theorem.

Simple and Compound Interest, Discount, and Annuities for terms of years.

The nature and use of Logarithms.

Geometry.

The first six books of Euclid, and the eleventh book to Prop. XXI, with deductions.

Conic Sections

Plane Trigonometry.

Solution of all cases of Plane Triangles. The expression for the Area of a Triangle in terms of its sides.

For Sanskrit, instead of the older Grammars, such works as Ishwar Chandra Sharma's two Grammars or that of Mr. William's, and for Bengali, Rammohun Roy's, Dr. Yates', or Shamachurn Sirkar's Grammar, will be used in the Examination.

Mechanics.

Composition and Resolution of Forces.
The Mechanical Powers.
The Centre of Gravity.
The general laws of Motion.
The motion of falling bodies in free space and down inclined planes.

Hydrostatics, Hydraulics and Pneumatics.

Pressure of liquids and gases, its equal diffusion and variation as the depth.
Specific Gravity.
Description and explanation of the barometer, siphon, common pump, forcing-pump, air-pump, and steam-engine.

Optics.

Laws of Reflection and Refraction.
Formation of images by simple lenses.

Astronomy.

Elementary knowledge of the Solar System, including the phenomena of Eclipses.

IV. Physical Sciences.

Chemistry.

The Atmosphere, its general nature and condition; its component parts—Oxygen and Nitrogen; their properties, water and carbonic acid; proportion of these substances in the air.
Chlorine and Iodine, as compared with Oxygen.
Water; its general relation to the atmosphere and earth; its natural states and relative purity; sea water, river water, spring water, rain water, pure water; effects of heat and cold on it; its compound nature; its elements.
Hydrogen; its nature and proportion in water; its presence in most ordinary fuels; its product when burnt.
Sulphur; phosphorus, and carbon, generally.
Nitric acid, sulphuric acid, carbonic acid; their elements.
Hydrochloric or muriatic acid.
Alkalies, earths, oxydes, generally.
Salts; their nature generally; sulphates; nitrates; carbonates.
Metals generally; iron, copper, lead, tin, zinc, gold, silver, platinum, mercury.
Powers of matter; aggregation; crystallization; chemical affinity; definite equivalents.
Combustion; flame; nature of ordinary fuel; chief results of combustion, *i. e.*, the bodies produced.
Heat; natural and artificial sources; its effects; expansion; solids, liquids, gases,t hermometer, conduction, radiation, capacity, change of form, liquefaction, steam.

Animal Physiology.

As contained in Knox's translation of Milne Edwards' Zoology, or other similar works.

Physical Geography.

Physical Geography, as contained in Hughes or any other similar work.

V. MENTAL AND MORAL SCIENCES.

Logic.

The Elements of Logic, as contained in Whateley or any similar work.

Moral Philosophy.

Moral Philosophy, as contained in Wayland, Abercrombie, or any similar work.

Mental Philosophy.

Mental Philosophy, as contained in Abercrombie, Dr. Payne, or any similar work.

Candidates shall not be approved by the Examiners unless they show a competen knowledge in all the above-mentioned branches of Examination, *viz.* :

1.—Languages.
2.—History.
3.—Mathematics and Natural Philosophy.
4.—Physical Sciences.
5.—Mental and Moral Sciences.

The Examinations for the degree of B. A. shall be conducted in the following order :—

(To be filled up by the Senate.)

On the morning of the *second Monday* after the Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed. Those in the first division shall be recommended for the Examination for Honors.

For the first three years after the University shall have been established, Candidates will be admitted to the Examination for a degree of B. A. who have at any time previously passed the Entrance Examination and can produce Certificates of good moral character.

HONORS.

Any Candidate who has been placed in the first division at the Examination for the degree of B. A., provided he have not delayed proceeding to the Examination for that

degree more than five years from the date of passing the Entrance Examination, may be examined for Honors in any one or more of the following branches :

1.—Languages.
2 —History.
3. – Mathematics and Natural Philosophy.
4.—Natural History and the Physical Sciences.
5.—The Mental and Moral Sciences.

Candidates for Honors must give notice in writing to the Registrar, on or before the *last day of March,* of their intention to enter into the Examination, specifying the branch or branches in which they desire to be examined.

I. Candidates for Honors in LANGUAGES shall be examined in Latin and Greek, or in English and Arabic, or in English and Sanskrit.

In Latin, Greek and English, a limited range of subjects shall be selected by the Senate from approved classical authors : and in Arabic and Sanskrit the Examination shall be in the following works :

Arabic.

Alif Lailah, Nafat al Yaman, Ikhwán al Safa, Taríkh al Kholfa, Taríkh Yamíní, Hamásah, Maqámát Harírí (one-half), Dewán Ibn Fáriz.

Sanskrit.

Raghuvansa, Kumārasambhava Kirātārjuníya, Sisúpālavadha, Viracharita, Uttaracharita, Mudrārākshasa, Sakuntalá, Kādambari, Part I.

The Examination shall include translation into any vernacular language, and retranslation from any vernacular language. It shall also include composition in any vernacular language upon questions arising out of the authors selected for Examination. The Candidates will also be examined in Comparative Grammar and Philology, the principles of Composition and the History of English Literature.

The Examination shall be so conducted as to test the exact and critical acquaintance of the Candidates with the subjects selected by the Senate, and also their general acquaintance with the literature of the languages in which they are examined.

II. Candidates for Honors in HISTORY shall be examined in the following subjects .

The History, political, constitutional, social and religious, of the principal ancient and modern nations of the world.

The History of modern civilization.
Chronology.
Ethnology.
Geography, in its bearing on History.
Political Philosophy.
Political Economy.

III. Candidates for Honors in MATHEMATICS and NATURAL PHILOSOPHY shall be examined in the following subjects :

Algebra, including the theory of Equations.
Plane Analytical Geometry.
Solid Geometry, treated geometrically.
Differential and Integral Calculus.
Spherical Trigonometry.
Statics and Dynamics.
Hydrostatics.
Hydraulics and Pneumatics.
Optics.
Astronomy.

IV. Candidates for Honors in NATURAL HISTORY and the PHYSICAL SCIENCES shall be examined in the following subjects :

Zoology and Animal Physiology.
Botany and Vegetable Physiology.
Geology and Mineralogy.
Chemistry.
Electricity and Magnetism.
Meteorology.
Physical Geography.

V. Candidates for Honors in the MENTAL AND MORAL SCIENCES shall be examined in the following subjects :

Logic.
Philosophy of Rhetoric.
Natural Theology.
Moral Philosophy.
Mental Philosophy.

They shall also be examined in one at least of the following subjects, to be selected by the Candidate himself :

Philosophy of the Inductive Sciences.
Elements of Jurisprudence.
Philosophy of Education.
Evidences of Revealed Religion as contained in Butler's Analogy and Paley's Evidences.

The Examinations for Honors shall take place in the following order, *viz.*, Languages in the first week, History in the second, Mathematics and Natural Philosophy in the third, Natural History and the Physical Sciences in the fourth, and the Mental and Moral Sciences in the fifth week, after the general Examination for the B. A. degree.

The Examination shall take place on the *Tuesday, Wednesday and Thursday* of each week, in the mornings from 10 A. M to 1 P. M., and in the afternoons from 2 to 5 P. M.

The Examiners shall publish, in the week following each Examination for Honors, a list of the Candidates who acquit themselves to their satisfaction, in order of proficiency, and in three classes Candidates shall be bracketted together, unless the Examiners are of opinion that there is a clear difference between them.

In determining the relative position of Candidates for Honors in the several branches, the Examiners shall have regard to their proficiency in the corresponding subjects at the B. A. Examination.

The first Student of the first class in each branch shall receive a Gold Medal and a prize of Books to the value of One hundred Rupees, and the second Student of the first class in each branch shall receive a Silver Medal and a prize of Books to the value of One hundred Rupees, provided that their answers are considered by the Examiners to possess sufficient merit.

Master of Arts.

Every person who, immediately after passing the B. A. Examination, obtains Honors in any one or more of the above-mentioned five branches of knowledge, shall be entitled to the degree of Master of Arts without further examination or fee.

Any other Graduate of this or any other Indian University, or of any of the Universities of the United Kingdom, may be admitted to the Examination for the degree of M. A. on payment of a fee of fifty Rupees.

No Special Examination will be held, but the Candidate must pass the Honor Examination in at least one of the prescribed branches of knowledge. He must give notice in writing to the Registrar, on or before the *last day of March*, of his intention to enter into the Examination, specifying the branch in which he desires to be examined, and must at the same time furnish a Certificate of having received the degree of B. A.

Every Candidate for the degree of M. A. is expected to possess a competent knowledge of every subject included in the branch in which he is examined.

If a Candidate fail to pass the Examination, the fee will not be returned to him. He may be admitted to any one or more subsequent Examinations on payment of a like fee of fifty Rupees on each occasion.

The names of the successful Candidates for the degree of M. A. shall be published in an alphabetical list, and each successful Candidate shall receive with his degree a Certificate setting forth the branch in which he was examined.

General.

No question shall be put at any University Examination, so as to require an expression of religious belief on the part of the Candidate ; and no answer or translation given by any Candidate shall be objected to on the ground of its expressing any peculiarity of religious belief.

G.

SUB-COMMITTEE IN MEDICINE.

In conformity with the resolution passed at the last General Meeting of the University Committee, the Sub-Committee in Medicine, now constituted as per margin, having given their best consideration to the remarks and suggestions received from the other Presidencies, and to the Report of the Council of the Medical College of Calcutta, beg now to submit a revised Code of Rules for the granting of Medical Degrees.

K. Mackinnon, J. Macrae, H Walker, F. J. Mouat, Esquires.

The Sub-Committee trust that, as now submitted, these Rules may be approved of. After further discussion and consideration of the question, the majority of the Sub-Committee remain of opinion that, as it can be done without reducing the necessary standard of acquirement, it will be for the interest of Medical Education to condense the curriculum of study in the Calcutta School into four years, because they consider that the longer course of study deters many, and perhaps a better educated class of Students, from the study of Medicine. But the Sub-Committee think, that a far better means of encouragement would be, to increase the number of Scholarships in the Medical College. If this were done, the Committee are of opinion that the age for entering upon the study of Medicine might be changed from 16 to 17 years. Without the encouragement just alluded to, they believe that the change to 17 years will tend further to discourage the study of Medicine

Mr. Walker is of opinion that the curriculum of study should extend over 5 years, beginning at the age of 16; or over 4 years, beginning at the age of 17.

In the matter of Clinical Instruction, it will be found that the Sub-Committee has extended the period of Hospital attendance, and defined the amount of Clinical Instruction which they consider necessary. They by no means wished to undervalue, or disregard the great importance of this essential part of Medical Education.

It will be observed further, that some alterations have been made in the Rules for the Degree of Doctors of Medicine, including the provision that all Candidates must have previously obtained the Degree of Bachelor of Arts, or have passed an examination equivalent to the same. The latter stipulation is considered necessary, with reference to the Rules framed by the Sub-Committee in Arts.

K MACKINNON.
JAMES MACRAE.
F. J MOUAT.

MEDICINE.

Qualifications of Candidates for Degree of Licentiate.

CANDIDATES for the Degree of Licentiate in Medicine and Surgery shall be required—

1 To have been engaged during Four Years in their professional studies at a School of Medicine.

2. To have passed the Entrance Examination of the Faculty of Arts of the University of Calcutta,* previous to commencing the study of Medicine.

3. To pass two Examinations.

FIRST EXAMINATION.

Certificates required from Candidates for first Examination.

The FIRST EXAMINATION shall take place once a year, and commence in the third week of March.

No Candidate shall be admitted to this Examination unless he have produced Certificates to the following effect :

1. Of having completed his eighteenth year.

2. Of having been engaged in Medical Studies for at least two Academic Years.

3. Of having attended Courses of Lectures on the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY, ...	*Two Courses.*
GENERAL ANATOMY AND PHYSIOLOGY, ...	*One Course.*
CHEMISTRY, ...	*Two Courses.*
BOTANY, ...	*One Course.*
MATERIA MEDICA, ...	*One Course.*

4. Of having Dissected during Two Winter Terms, and of having completed at least Twelve Dissections during each of those Terms.

5. Of having attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of General and Pharmaceutical Chemistry ; in applying tests for discovering the adulteration of articles of the Materia Medica and the presence and nature of Poisons ; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c.

6 Of having attended to Practical Pharmacy for at least Three Months, producing a certificate of having acquired a practical knowledge of the preparations and compounding of Medicines.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

* The Examination, it is understood, may be passed at the Provincial affiliated Institutions.

Subjects of Examination.

Candidates shall be examined in the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY

CHEMISTRY

BOTANY.

MATERIA MEDICA AND PHARMACY.

Modes of Examination.

The Examinations in these subjects, shall be written, oral, and practical.

Passed Candidates to be arranged in 2 Classes.

The days and hours of the Examinations shall be publicly notified at least one fortnight before they are held. At the end of one week from the day of the last Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed ; and a Pass Certificate, signed by the Registrar, shall be delivered to each Candidate.

Such Candidates only, as in the opinion of the Examiners are admissible to Examination for Honors, shall be placed in the First Division.

EXAMINATION FOR HONORS.

Any Candidate who has been placed in the First Division at the FIRST EXAMINATION, may be examined for Honors in any or all of the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY.

Candidates may illustrate their answers by sketching the parts they describe.

CHEMISTRY.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

STRUCTURAL AND PHYSIOLOGICAL BOTANY.

Time and mode of Examination

The Examinations shall take place in the week following the promulgation of the result of the FIRST EXAMINATION. They shall be conducted by means of printed papers and practical tests.

The Examinations shall be conducted in such order and at such hours, as shall be fixed by the Senate of the University, due notice of the same being given.

Proficiency at Pass Examination to be regarded.

In determining the relative position of Candidates, the Examiners shall have regard to the proficiency evinced by the Candidates in the same subjects at the Pass Examination.

Scholarship.

If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most in Descriptive and Surgical Anatomy, the Candidate who shall distinguish himself the most in Chemistry, the Candidate who shall distinguish himself the most in Materia Medica and Pharmaceutical Chemistry, and the Candidate who shall distinguish himself the most in Botany, shall each receive a Scholarship of Sixteen Rupees a month for the next Two Years.

No single Candidate shall hold more than one Scholarship at the same time.

Prizes.

Under the same circumstances, the First and Second Candidate in each of the preceding subjects, shall each receive a Microscope of the value of One Hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Structural and Physiological Botany, shall receive a similar Prize.

SECOND EXAMINATION.

Qualifications required of Candidates for Second Examination.

The SECOND EXAMINATION shall take place once a year and commence in the third week of March.

No Candidate shall be admitted to this Examination within Two Years of the time of his passing the FIRST EXAMINATION, nor unless he have produced Certificates to the following effect :—

1. Of having passed the FIRST EXAMINATION.

2. Of having subsequently to having passed the FIRST EXAMINATION attended Lectures on :

COMPARATIVE ANATOMY, ...	*One Course.*
GENERAL ANATOMY AND PHYSIOLOGY, ...	*One Course.*
MEDICINE (*including* HYGIENE) AND GENERAL PATHOLOGY,*	*Two Courses.*
SURGERY (*including* DISEASES OF THE EYE)*	*Two Courses.*
MIDWIFERY, ...	*One Course.*
MEDICAL JURISPRUDENCE, ...	*One Course.*

3. Of having subsequently to having passed the FIRST EXAMINATION Dissected during One Winter Term, and of having performed operations on the dead subject during the other—the Certificate of the latter to specify the number and nature of the operations so performed.

4. Of having conducted at least Four Labours.

Certificates on this subject will be received from any legally-qualified Practitioner in Medicine.

* These should, if possible, be given as separate courses.

5. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during 24 months, and Lectures on Clinical Surgery during such attendance.

6. Of having attended the Medical practice of a recognised Hospital or Hospitals during other 24 months, and Lectures on Clinical Medicine during such attendance.

The course of Chemical Instruction to extend from 15th June to 15th March, one Lecture to be given twice a week, and Bed-side Instruction on the intervening days.

7. Of having attended the practice of an Eye Infirmary during Three Months.

The Candidate shall produce reports of six Medical and of six Surgical cases, drawn up and written by himself during his period of service as Clinical Clerk and Dresser.

The said cases to be duly authenticated by the Professors of Medicine and Surgery respectively.

The Candidate shall also produce a Certificate of general character and conduct from a Teacher—as far as the Teacher's opportunity of knowledge has extended.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar, at least fourteen days before the Examination begins.

Subjects of Examination.

Candidates shall be examined in the following subjects :—

PHYSIOLOGY.

The papers in Physiology shall include questions in Comparative Anatomy.

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, HYGIENE.
SURGERY (*including* DISEASES OF THE EYE).
MEDICINE.
MIDWIFERY.
MEDICAL JURISPRUDENCE.

Modes of Examination.

The Examinations shall be written, oral, and practical.

The Examinations shall be conducted on days and at hours to be notified, at least one fortnight before their commencement.

The Practical (Clinical) Examination in Medicine and Surgery shall be conducted in the wards of a Hospital, by the Examiners of those Branches.

In Medicine and Surgery, each Candidate shall be required to examine, diagnose, and treat six cases of Acute or Chronic Disease, to be selected by the Examiners ; to draw up careful histories of these cases, and to perform and report in detail Necroscopical Examinations, should any of the selected cases end fatally. Should none so terminate

the *post-mortem* examination of any other cases that may have died in Hospital shall be performed and reported by the Candidates.

The Candidates shall in addition perform such of the minor operations of Surgery as may be required in the Out-door Dispensary of the Hospital at the time of the Examination, and as the Examiners may select.

They shall also each perform three capital operations upon the dead subject, after detailing to the Examiners the Pathological conditions in which such operations are necessary, the different modes of operation adopted, and their reasons for preferring any particular mode of procedure.

They shall also, apply apparatus for great surgical injuries and explain the objects to be attained by them, as well as the best manner of effecting those objects.

They shall also, in the Medical Wards, examine morbid products chemically, and by the aid of the Microscope, in the presence of the Examiners, demonstrating the results obtained.

Passed Candidates to be arranged in two classes.

On Monday in the week following the conclusion of the Clinical Examination, the Examiners shall arrange in two Divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate.

Such Candidates only, as in the opinion of the Examiners are admissible to the Examination for Honors, shall be placed in the First Division.

EXAMINATION FOR HONORS.

Subjects for Honor Examination.

Any Candidate who has been placed in the First Division at the SECOND EXAMINATION may be examined for Honors in any, or all of the following subjects :

PHYSIOLOGY AND COMPARATIVE ANATOMY.

Candidates may illustrate their answers by sketching the parts they describe.

SURGERY.

MEDICINE.

MIDWIFERY.

MEDICAL JURISPRUDENCE.

Time and mode of Examination.

The Examinations shall take place in the week following the completion of the SECOND EXAMINATION They shall be conducted by means of printed papers and practical tests, and Examiners shall

not be precluded from putting *vivâ voce* questions upon the written answers of the Candidates, when they appear to require explanation.

The Examinations shall be conducted in such order as will be made known annually by the Senate of the University.

Proficiency at Pass Examination to be regarded

In determining the relative position of Candidates, the Examiners shall have regard to the proficiency evinced by the Candidates in the same subjects at the Pass Examination.

Candidates to be arranged according to proficiency.

Candidates who pass the Examination, and acquit themselves to the satisfaction of the Examiners, shall be arranged according to the several subjects and according to their proficiency in each; and Candidates shall be bracketed together, unless the Examiners are of opinion that there is a clear difference between them.

Scholarships.

If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most in Physiology and Comparative Anatomy, the Candidate who shall distinguish himself the most in Surgery, and the Candidate who shall distinguish himself the most in Medicine, shall each receive a Scholarship of Forty Rupees per mensem for the next Two Years, with the style of UNIVERSITY MEDICAL SCHOLAR. Only one such Scholarship shall be tenable by the same Candidate.

Prizes.

Under the same circumstances, the First and Second Candidates, in Physiology and Medicine, shall each receive a Microscope of the value of One Hundred Rupees. In the event of the successful Candidate having obtained a Prize Microscope at the First Honor Examination, he shall obtain a prize of Books of the same value.

The first Candidate in Surgery shall receive a prize of Surgical Instruments of the value of One Hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Midwifery shall receive a case of Midwifery Instruments, and the Candidate who shall stand first in Medical Jurisprudence shall receive a Toxicological Cabinet of the value of One Hundred Rupees.

DOCTOR OF MEDICINE.

The Examination for the Degree of Doctor of Medicine shall take place once a year, and commence on the first Monday in December.

Certificates required from Candidates for Doctor's Degree.

No Candidate shall be admitted to this Examination, unless he have produced Certificates to the following effect:

1. Of having attained the Degree of Bachelor of Arts in this or any other University, or of having passed an Examination equivalent to that required for the Degree in question, of having been engaged two years in the study or practice of his profession

subsequent to his having taken the Degree of Licentiate in Medicine and Surgery in this University, or a Degree in Medicine or in Surgery at a University, the Degrees granted by which are recognised by the Senate of this University.

Those Candidates who have not taken the Degree in this University shall produce a Certificate of having completed their Twenty-third year, and of having been engaged two years in the study or practice of their profession.

Certificates of moral character, signed by two persons of respectability.

The Examinations shall be conducted by means of printed papers and *vivâ voce* interrogation.

Candidates shall be examined in the following subject:—

MEDICINE, *including* PRACTICE OF PHYSIC, SURGERY, AND MIDWIFERY.

The Examination shall be conducted in such order as will be communicated annually by the Registrar of the University.

Passed Candidates to be arranged in 2 Classes.

On Monday morning in the following week, the Examiners shall arrange in two Divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate.

REGULATIONS RELATING TO STUDENTS WHO COMPLETED THEIR MEDICAL STUDIES IN OR BEFORE MARCH 1856.

Special Rules for present and past Students.

CANDIDATES who completed their Medical Studies in or before March 1856, shall be allowed to present themselves for the Degree of Licentiate in Medicine and Surgery and of Doctor of Medicine, on producing the Certificates and other documents specified in the foregoing Regulations.

The first Pass or Junior Diploma Certificate of all Students of the Calcutta Medical College, who have obtained that Certificate prior to the promulgation of these Regulations, shall be accepted as equivalent to the First Examination Certificate of this University.

Graduates of the Medical College, who may wish to obtain the Degree of Doctor of Medicine, shall produce the Diploma of Graduate of Medicine of the Medical College of Calcutta, and afford proof of having been engaged for Five Years in the practice of their profession.

The Examinations shall be the same as those specified in the Regulations hereinbefore contained.

H.

CALCUTTA UNIVERSITY.

REPORT OF THE SUB-COMMITTEE OF LAW.

Sub-Committee have re-considered former Reports

THE Sub-Committee of Law, now consisting of Sir James Colvile, Mr. Eliott, Mr. LeGeyt, Mr. Trevor, the present Advocate General (Mr. Ritchie,) Baboo P. C. Tagore, and Baboo Ramapersaud Roy, have re-considered the former Report made by the Sub-Committee of Law in connection with the remarks made upon it by the several Governments of the North-Western Provinces, Fort St. George, and Bombay, and submit the following additional Report.

Qualifications for Examination for Degree

The Sub-Committee have in the first place considered the propriety of modifying the conditions formerly proposed as those on which a candidate for a degree in Law shall be allowed to present himself for examination.

The Sub-Committee formerly proposed—

Sub Committee's former proposals.

1st—To follow the rule of the London University and to admit any candidate to examination after the expiration of one academical year from the time of his obtaining a degree in Arts in one of the Indian or European Universities.

2ndly—To afford to students the means of graduating in Law without graduating in Arts, and for that purpose to admit any candidate to examination after the expiration of four years from the time of his passing the Entrance Examination in any Indian University.

3rdly.—To give facilities to students of a more advanced age, and to admit any candidate of the age of 21 years and upwards to the examination for a degree in Law at any time after he has passed the Entrance Examination in one of the Indian Universities.

Opinions on these proposals

The Madras Government and the Director of Public Instruction at that Presidency do not object to these proposals, and express approval of that part of the scheme which permits, under certain conditions, students who have not previously graduated in Arts to take a degree in Law. On the other hand, the Lieutenant-Governor of the North-Western Provinces and the Bombay Government are strongly in favor of making a degree in Arts a necessary condition to a degree in Law. The Bombay Government and those whom it has consulted further object to the rules proposed by the Sub-Committee, that they contemplate giving a degree to the student after one year's study of the Law.

The latter objection is founded on misapprehension. The proposal was framed with reference to the system already proposed and sanctioned for the Presidency College. It was part of that system, that a student, after two years' residence in the College and during the latter part of his College career, should be allowed to betake himself to the study of the Law in exclusion of other branches of study. It was further conceived, and this must doubtless be the system of the London University, that a student in any case, and certainly if he were content with a pass degree in Arts, might carry on his legal studies concurrently with his other studies. It was not supposed that the course of legal study would be less than three years, the student giving, or being at liberty to give, the last year exclusively to Law. The Sub-Committee have however resolved to remove all misapprehension on this point by adopting a suggestion of Mr. Reid, and requiring proof of the continuous study of the Law, so far as the Certificate of Attendance on lectures can afford that proof, during a certain time. The only objection to this is, that it is likely practically to prevent any person who has not the means of studying the Law in a Presidency Town from taking a degree in that faculty, and if this result should follow, it will be difficult for the several Governments to give all those advantages to graduates in Law in the way of employment in the Public Service, or otherwise which are sometimes contemplated, without injustice to meritorious men who, prevented by distance or other circumstances from taking a Law degree, have nevertheless qualified themselves for the like employment in other ways.

Degree in Arts as a necessary condition to a degree in Law.

Upon the question, whether a degree in Arts should be a necessary condition to a degree in Law, the Sub-Committee is unable to come to a conclusion until the standard of a pass degree in Arts is finally settled. The Sub-Committee, admitting the desirableness of encouraging a high degree of general education in the graduates in Law, is nevertheless inclined to think, that the Bombay Government in particular is disposed to push the principle too far. The question of legal education has recently been considered by a body of eminent men in England, and the test of general education which that body recommends as fit to be imposed on candidates for the Bar is far short of what is called for at Bombay. Upon the whole the Sub-Committee has come to the resolution that, if the standard for an ordinary degree in Arts is reasonably limited in the range of subjects and not too high, it should be made a necessary condition of a degree in Law.

If, however, the Sub-Committee of Arts finally recommend a very high standard for a degree in Arts, or a certain proficiency in many branches of knowledge not essential to a lawyer, and the general Committee or the future Senate adopt that recommendation, the Sub-Committee of Law would be in favor of admitting candidates for a degree in Law to examination on lower terms. They are disposed however to think that the test of general education should even in that case be higher than that of the Entrance Examination. Should the Committee adopt a suggestion of the Director General of Public Instruction at Madras, and determine to have a previous or intermediate examination, instead of or in addition to the Entrance Examination, the Sub-Committee of Law conceive that the candidate for a degree in Law should be required to have passed that examination. If that suggestion is not adopted, the Sub-Committee is of opinion that the candidates for a degree in Law should be required, during the latter portion of their University career, to pass a special examination, designed to test their general knowledge in subjects to be prescribed by the Senate, and which ought, in particular, to include Constitutional History, Logic and Moral Philosophy.

Rules now proposed.

The rules proposed by the Sub-Committee then are the following :

1st—To admit a candidate for a Law degree to examination after the expiration of one academical year from the time of his obtaining a degree in Arts in one of the Indian or European Universities, provided he produce Certificates of his having attended lectures in some School of Law recognised by the Senate for a period of three years in the whole.

2ndly—(And this only in the event of the standard of an ordinary degree in Arts being fixed so high as to make it too severe a test of the general education of a Law student) To admit any candidate to examination after the expiration of three years from the time of his passing the previous examination in any Indian University (if a previous examination be adopted), or after the expiration of five years from the time of his passing the Entrance Examination in any Indian University, provided he do in the latter case pass during the last three of such five years a special examination in general subjects to be prescribed by the Senate, and do in either of the above cases produce Certificates of his having attended lectures in some School of Law recognised by the Senate during at least three years.

Subjects of examination.

The Sub-Committee have also re-considered their former suggestions touching the subjects of examination. These have been severely criticised at Bombay, but the Sub-Committee after full consideration are not disposed to admit the justice of the criticism or the insufficiency of the tests proposed by them, or materially to modify their former recommendations

On the other hand, they entirely agree with His Lordship the Governor of Bombay in thinking that it will be inexpedient to fetter the discretion of any University in this matter. They would leave the Senate of the University at Bombay at full liberty to frame its own tests, believing that the tests of a Law degree at each University must in some degree be modified by the course of legal instruction afforded at the particular Presidencies and the views of those members of the particular Senate who may happen to take a peculiar interest in the faculty of Law.

Modifications of tests formerly proposed.

The modifications which the Sub-Committee propose in their former recommendations are the following :

They would omit from the paragraph which relates to the examination on Municipal Law, the words "including herein the law of adoption amongst Hindoos" and the words "the two latter branches to be treated with special reference to the Hindoo and Mahomedan Law," not because they desire in any way to diminish the attention to be given to the Hindoo and Mahomedan systems of Law, but because it has been suggested that special mention of these subjects is unnecessary, and may cause a narrower interpretation to be put upon the general words than they ought to receive, and thus lead to the neglect of other branches of legal instruction.

They have also come to the conclusion that, on the second and third of the sub divisions contemplated by that paragraph, at least two papers should be set.

Tests finally recommended.

The tests then which the Sub-Committee finally recommend as tests for an ordinary degree in Law are the following :—

There should be—

1*st.*—An examination sufficient to test the candidate's knowledge of the general principles of Jurisprudence. Probably one paper will be sufficient for this purpose.

2*ndly.*—An examination sufficient to test the candidate's knowledge of the several systems of Municipal Law which obtain in this country—*first,* as it concerns personal rights and status ; *secondly,* as it concerns property, including of course the general nature and the various kinds of property, the different modes of acquiring it, and herein the Law of Contracts, and the Law of Succession, whether testamentary or *ab-intestato ; thirdly,* as it concerns the sanction of rights, or the remedies for wrongs, and herein the general principles of procedure, the Law of Evidence, and the Criminal Law.

Number of papers to be set.

On the first of these sub-divisions, one paper should be set, on the second two papers should be set, one probably being confined to the Law of Contracts ; on the third there should also be two papers, of which one may conveniently be confined to the Criminal Law and Criminal Procedure. The examination for an ordinary Law degree will thus occupy three days, and the successful candidates like those who pass in Arts may be divided into two classes.

Examination for Honors.

The Sub-Committee is not prepared to propose any modification of the examination for Honors formerly recommended by them.

They think, however, that in classing the candidates for Honors after their final examination, regard should be had to the number of marks which each candidate has attained in the Degree Examination. They believe that by such classification, the standard of the Degree Examination and its estimation in the eyes both of those who do, and of those who do not, compete afterwards for Honors and of the Public will be raised, while a better test will be afforded of the comparative powers of the candidates for Honors than if they were examined in the separate papers set for Honors alone.

The Sub-Committee are disposed to think that, if the Examination for Honors were to succeed at a short interval only the ordinary examination, and if the latter, though rendered compulsory on the candidates for Honors were to have no influence on their success in their subsequent examination, the ordinary examination would be looked on without interest and even with distaste by such candidates, and would be considered rather as an impediment to their preparation for the more important examination than as a legitimate field for emulation. The effect of this is likely to be bad both upon the candidates for Honors themselves, as leading them to look to the ordinary examination as one through which they have only to pass, however low their place, and the belief that their real contest will only begin when the first examination is over, and upon those who do not propose to pass in Honors, by tending to depreciate the value of an examination the foremost men in which may immediately afterwards be completely distanced by others far below them in the first three days' contest. It appears to the Sub-Committee that

there will be no want of room for the student of large acquirements and cultivated intel lect to show his ability in the easier examination of the first three days, and that this examination, coupled with the more difficult one of the last two, will afford a better test of his general ability and knowledge than a seperate examination for Honors alone; while on the other hand the examinations for the ordinary degree cannot fail to be looked on with much more interest, and to be attended with more satisfactory results if the best students of each year are induced to compete vigorously for high place in them

If this suggestion be not adopted, the Sub-Committee think that the Examination for Honors should comprise six papers and should extend over three days. The two additional papers should in that case be given on all the subjects included in the Degree Examination, although they should be of a more difficult character than the papers in that examination.

One degree in Law sufficient.

The majority of the Sub-Committee continues to think, that it is not expedient to have more than one degree in Law

JAMES WM. COLVILE
D. ELLIOT.
PROSUNNO COOMAR TAGORE.
P. W. LEGEYT.
RAMAPERSAUD ROY.
W. RITCHIE.
C. TREVOR.

I.

CALCUTTA UNIVERSITY.

REPORT OF THE SUB-COMMITTEE OF CIVIL ENGINEERING

THE Sub-Committee of Civil Engineering, enlarged by the addition of Colonel Smith, having considered the remarks made by the different authorities to whom the several Reports were sent, have the honor to submit the following Supplemental Report.

Some of these remarks appear to us to have been made under a misapprehension of our meaning. We had not, as supposed by the Right Hon'ble the Governor of Bombay, any intention of relaxing in favor of Students in the Government Colleges the general Rule under which the degree of B. A. was required of all Candidates for a degree in Civil Engineering.

Unless the standard of the B A. degree be higher than that which the Sub-Committee of Arts proposed in their First Report, we concur with Lord Elphinstone in thinking that the degree of B. A. should be enforced from all Candidates for the professional degree in Civil Engineering ; but in order to permit Students, who intend hereafter to adopt the profession of an Engineer to acquire at an early period some special acquaintance with their profession, we recommend that the Civil Engineering Colleges (if their Rules and Course of Study will admit of it) be so affiliated to the University, that all or part of the four years' study required for the B. A. degree may be passed in one of those Colleges.

After the Student has obtained his B. A. degree, he should devote four years to special professional studies, and for two of those years he should practise his profession under the guidance and instructions of Engineers in charge of works, so as to give him a practical knowledge of at least one branch of Civil Engineering.

General Waddington and others recommend that, if only one degree be granted in Civil Engineering, its designation should be " Master" and not " Bachelor ;" we concur in this recommendation, being of opinion that the term " Master" is peculiarly appropriate to the profession of Engineering. With advertence to some remarks made on the " Subjects of Examination" proposed, we would reduce and slightly modify the list previously given.

We are not aware that it is desirable to alter our former Report in any other respect

Proposals.

Our proposals will now stand as follows :—

One degree to be given in Civil Engineering, and every one who passes a successful Examination, and obtains the degree, shall be called " Master of Civil Engineering" (" M. C. E.")

Examination to be annual

An Examination for this degree shall be held annually in the month of March.

No Candidate shall be admitted to Examination for this degree until he has obtained the degree of B. A. in one or other of the Indian or European Universities, and until he produce Certificates of having passed four subsequent years in the study and practice of the profession. Two of the four years must be passed in actual professional practice under an Engineer in charge of works.

Candidates must have obtained B. A. degree four years previously.

Subjects of Examination.

The Examination shall be conducted entirely by means of printed papers. It shall be sufficient to test the Candidate's knowledge of

MATHEMATICS.
- Spherical Trigonometry, as applied to Geodesy.
- Composition and Resolution of Forces.
- Equilibrium of Arches.
- Strength and Stress of Material.

NATURAL PHILOSOPY.
- Steam, its power, properties, and various applications.
- Fuel of various kinds, estimation of calorific power, electricity, and the various appliances for making it economically useful.
- Meteorology, Physical Geography, } especially of India.
- Chemistry, as applicable to cements, conditions and effects of fermentation, causes of decay, and preservatory processes.
- Geology, Mineralogy, } The nature of soils and earths, the selection of building and road materials.
- Botany, vegetable products, timber, fibres, oils.
- Theory of Rivers.

ARCHITECTURE.
- The Classic orders and their parts, their application, principles of composition.
- Styles, } Peculiarities of different styles, and their modes of adoption.

PRACTICAL SCIENCE.
- Drawing in all its branches, geometrical, perspective, and isometrical.
- Hydrography.
- Mechanism and Mill-work.
- Animal power.
- Various Mechanical Arts, *viz.* carpentry, building, smith-work, iron-founding, and forging.
- Preparation of material.
- Brick-making.
- Lime-burning.
- Pottery.
- Modelling.
- Timber-cutting.
- Artificial Foundations.

Classification of passed Candidates.

The Examiners shall place in a Class by themselves such of the passed Candidates as they think should be allowed to try for Honors, and the remainder of the passed Candidates will form a second Class. Both Classes will be arranged in alphabetical order.

HONORS.

Examination for Honors to test higher attainments in any of the same subjects

The Examination for Honors, to be held one month after the general Examination, will test a higher degree of attainments in any of the branches of Science above enumerated, at the option of the Candidates. "Those entitled to Honors shall be arranged in three Classes and in order of merit."

C. ALLEN,
H. GOODWYN, *Col.*,
Bengal Engineers.
W. E. BAKER, *Lt.-Col.*,
Bengal Engineers.
J. SMITH, *Lt.-Col.*,
Madras Engineers.

CALCUTTA,
10*th June* 1856.

K

At a Meeting of the University Committee, held at the Medical College Hospital on the 9th of July 1856, *at which were present—*

The Hon'ble Sir JAMES COLVILE, *President (in the Chair.)*

The Hon'ble J. P. Grant.
C. Allen, Esquire
C. Beadon, Esquire.
D Elliot, Esquire.
H Woodrow, Esquire
Baboo Ramgopaul Ghose.
Pundit Issur Chunder Surma.
Baboo Ramapersaud Roy
" Prosunno Coomar Tagore.
Colonel Baker.
Revd. Dr Duff.
" J. Mullens.
" J. Ogilvie.
" D. Ewart.
Dr. Mackinnon
" Macrae
H. Walker, Esquire
W. G. Young, Esquire

The following Resolutions were passed :—

1. On the motion of Dr. K. Mackinnon—

That the Report of the Sub-Committee of Arts be adopted by the Committee.

2 On the motion of Mr. C. Beadon—

That whenever, in the Medical Sub-Committee Scheme, it is required that a Candidate for Degrees or Honors shall have been engaged in previous professional studies, those studies must have been pursued in a School of Medicine recognized by the Senate

3 On the motion of Mr H Walker—

That the curriculum of study for the Degree of Licentiate in Medicine shall extend over *five* years, and that Candidates shall not go up to the second Examination for the Licentiate's Degree, until the expiry of three years from the First Examination.

4 On the motion of Mr C. Beadon—

That there be no Examination for Honors on the first Examination, but that the Examiners shall arrange them who pass the first Examination in two divisions, the first division to be arranged in order of merit, the second in alphabetical order ; and the prizes proposed by the Sub-Committee for the most successful Candidates at the Honor Examination be awarded to the most successful Candidates at the Pass Examination.

5 On the motion of Mr. C. Beadon—

That the Degree of Bachelor of Arts in this, or some other University, be made an essential preliminary to the Degree of M D

6. On the motion of Sir James Colvile—

That the Report of the Sub-Committee in Medicine be adopted, subject to the foregoing Resolution, and that Dr. Mackinnon, Dr. Macrae, and Dr. Walker, with Mr. Beadon and Mr. Young, be appointed a Sub-Committee to frame the necessary modifications.

7. On the motion of Mr. C. Beadon—

That the Report of the Sub-Committee of Law be adopted with the omission of the 2nd Rule proposed at page 5, it being the opinion of this Committee that a Degree of B. A. in this or some other University, should be a necessary condition to the Degree of B. L.

8. On the motion of Sir James Colvile—

That the Report of the Sub-Committee of Civil Engineering be adopted.

9 On the motion of Mr. C. Beadon—

That the Secretary be requested, on receiving the amended Scheme of Medicine from the special Sub-Committee appointed under the 6th Resolution, to draw up under the directions of the President a Report of the Committee's Proceedings, to be forwarded after signature by the Members of the Committee to the Government of India for consideration

(Signed) J. COLVILE,
President to the University Committee.

(True Copy)
W. G. YOUNG,
Secretary to the University Committee.

SUB-COMMITTEE IN MEDICINE.

In conformity with the 6th Resolution passed at the last General Meeting of the University Committee, the Sub-Committee in Medicine beg now to submit a revised Code of Rules for the granting of Medical Degrees.

The Sub-Committee trust that, as now submitted, these Rules may be approved of.

In the matter of Clinical Instruction, it will be found that the Sub Committee has extended the period of Hospital attendance, and defined the amount of Clinical Instruction which they consider necessary. They by no means wished to undervalue, or disregard the great importance of this essential part of Medical Education

It will be observed further, that some alterations have been made in the Rules for the Degree of Doctors of Medicine, including the provision that all Candidates must have previously obtained the Degree of Bachelor of Arts.

(Signed) K. MACKINNON.
" JAMES MACRAE.
" H. WALKER.
" C. BEADON.
" M. GORDON YOUNG.

MEDICINE.

Qualifications of Candidates for Degree of Licentiate

CANDIDATES for the Degree of Licentiate in Medicine and Surgery shall be required—

1 To have been engaged during five years in their professional studies at a School of Medicine

2. To have passed the Entrance Examination of the Faculty of Arts of the University of Calcutta,* previous to commencing the study of Medicine recognised by the University.

3. To pass two Examinations

* This Examination, it is understood, may be passed at the Provincial affiliated Institutions.

FIRST EXAMINATION.

Certificates required from Candidates for First Examination

The FIRST EXAMINATION shall take place once a year and commence in the third week of March.

No Candidate shall be admitted to this Examination unless he have produced certificates to the following effect :

1 Of having completed his eighteenth year.

2 Of having been engaged in Medical Studies for at least two Academic Years.

3. Of having attended Courses of Lectures on the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY, ... *Two Courses.*

CHEMISTRY, ... *Two Courses.*

BOTANY, ... *One Course.*

MATERIA MEDICA, ... *One Course.*

4 Of having Dissected during Two Winter Terms, and of having completed at least twelve Dissections during each of those Terms.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins

Subjects of Examination.

Candidates shall be examined in the following subjects :

DESCRIPTIVE AND SURGICAL ANATOMY.

CHEMISTRY.

BOTANY.

MATERIA MEDICA AND PHARMACY.

Modes of Examination.

The Examinations in these subjects shall be written, oral, and practical.

Passed Candidates to be arranged in 2 Classes.

The days and hours of the Examinations shall be publicly notified at least one fortnight before they are held. At the end of one week from the day of the last Examination, the Examiners shall arrange the successful Candidates in two divisions, the first to be arranged in order of merit, the second in alphabetical order.

Scholarships.

If in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most in Descriptive and Surgical Anatomy, the Candidate who shall distinguish himself the most in Chemistry, the Candidate who shall distinguish himself the most in

Materia Medica and Pharmaceutical Chemistry, and the Candidate who shall distinguish himself the most in Botany, shall each receive a Scholarship of Sixteen Rupees a month for the next three years.

No single Candidate shall hold more than one Scholarship at the same time.

Prizes

Under the same circumstances, the First and Second Candidate in each of the preceding subjects shall each receive a Microscope of the value of One Hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Structural and Physiological Botany shall receive a similar Prize.

SECOND EXAMINATION.

Qualifications required of Candidates for Second Examination

The SECOND EXAMINATION shall take place once a year, and commence in the third week of March.

No Candidate shall be admitted to this Examination within Three Years of the time of his passing the FIRST EXAMINATION, nor unless he have produced Certificates to the following effect :—

1. Of having passed the FIRST EXAMINATION.

2. Of having subsequently to having passed the FIRST EXAMINATION attended Lectures on—

COMPARATIVE ANATOMY, ... *One Course*

GENERAL ANATOMY AND PHYSIOLOGY, ... *Two Courses.*

MEDICINE (*including* HYGIENE) AND GENERAL PATHOLOGY, ... *Two Courses.*

SURGERY, ... *Two Courses.*

DISEASES OF THE EYE, ... *One Course of six months.*

MIDWIFERY, ... *Two Courses.*

MEDICAL JURISPRUDENCE, ... *One Course.*

3. Of having attended a course of practical Chemistry, comprehending practical exercises in conducting the more important processes of General and Pharmaceutical Chemistry ; in employing tests for discovering the adulteration of articles of the Materia Medica and the presence and nature of Poisons ; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c.

4. Of having attended to practical Pharmacy for at least three months, producing a certificate of having acquired a practical knowledge of the preparations and compounding of Medicines.

5. Of having subsequently to having passed the FIRST EXAMINATION Dissected during two Winter Terms, and of having performed operations on the dead subject during the last or fifth Winter Term,—the Certificate of the latter to specify the number and nature of the operations so performed.

6. Of having conducted at least five Labours. Certificates on this subject will be received from any legally-qualified Practitioner in Medicine.

7. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during twenty-four months, and Lectures on Clinical Surgery during such attendance.

8. Of having attended the Medical Practice of a recognised Hospital or Hospitals during twenty-four months, and Lectures on Clinical Medicine during such attendance.

The course of Clinical Instruction to extend from 15th June to 15th March, one Lecture to be given twice a week, and Bed-side Instruction on the intervening days.

9. Of having attended the practice of an Eye Infirmary during six months.

The Candidate shall produce reports of six Medical and of six Surgical cases, drawn up and written by himself during his period of service as Clinical Clerk and Dresser.

The said cases to be duly authenticated by the Professors of Medicine and Surgery respectively.

The Candidate shall also produce a Certificate of general character and conduct from a Teacher, as far as the Teacher's opportunity of knowledge has extended.

Certificates to be put in 14 days before Examination.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

Subjects of Examination.

Candidates shall be examined in the following subjects :—

PHYSIOLOGY.

The papers in Physiology shall include questions in Comparative Anatomy.

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, HYGIENE.

SURGERY (*including* DISEASES OF THE EYE).

MEDICINE.

MIDWIFERY.

MEDICAL JURISPRUDENCE.

Modes of Examination.

The Examinations shall be written, oral, and practical.

The Examinations shall be conducted on days and at hours to be notified, at least one fortnight before their commencement.

The Practical (Clinical) Examination in Medicine and Surgery shall be conducted in the wards of a Hospital, by the Examiners of those Branches.

In Medicine and Surgery, each Candidate shall be required to examine, diagnose, and treat six cases of Acute or Chronic Disease, to be selected by the Examiners; to draw up careful histories of these cases, and to perform and report in detail Necroscopical Examinations, should any of the selected cases end fatally. Should none so terminate, the *post-mortem* examination of any other cases that may have died in Hospital shall be performed and reported by the Candidates.

The Candidates shall in addition perform such of the minor operations of Surgery as may be required in the Out-door Dispensary of the Hospital at the time of the Examination, and as the Examiners may select.

They shall also each perform three capital operations upon the dead subject, after detailing to the Examiners the Pathological conditions in which such operations are necessary, the different modes of operation adopted, and their reasons for preferring any particular mode of procedure.

They shall also apply apparatus for great surgical injuries, and explain the objects to be attained by them, as well as the best manner of effecting those objects.

They shall also, in the Medical Wards, examine morbid products chemically, and by the aid of the Microscope, in the presence of the Examiners, demonstrating the results obtained.

Passed Candidates to be arranged in two classes.

On Monday, in the week following the conclusion of the Clinical Examination, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate.

Such Candidates only, as in the opinion of the Examiners are admissible to the Examination for Honors, shall be placed in the First Division.

Examination for Honors.

Subjects for Honor Examination

Any Candidate who has been placed in the First Division at the Second Examination may be examined for Honors in any, or all of the following subjects:

Physiology and Comparative Anatomy.

Candidates may illustrate their answers by sketching the parts they describe

Surgery.

Medicine.

Midwifery.

Medical Jurisprudence.

The Examinations shall take place in the week following the completion of the SECOND EXAMINATION. They shall be conducted by means of printed papers and practical tests, and Examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the Candidates, when they appear to require explanation.

Time and mode of Examination.

The Examinations shall be conducted in such order as will be made known annually by the Senate of the University.

In determining the relative position of Candidates, the Examiners shall have regard to the proficiency evinced by the Candidates in the same subjects at the Pass Examination.

Proficiency at Pass Examination to be regarded.

Candidates who pass the Examination, and acquit themselves to the satisfaction of the Examiners, shall be arranged according to the several subjects and according to their proficiency in each; and Candidates shall be bracketed together, unless the Examiners are of opinion that there is a clear difference between them.

Candidates to be arranged according to proficiency.

If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most in Physiology and Comparative Anatomy, the Candidate who shall distinguish himself the most in Surgery, and the Candidate who shall distinguish himself the most in Medicine, shall each receive a Scholarship of Forty Rupees per mensem for the next Two Years, with the style of UNIVERSITY MEDICAL SCHOLAR. Only one such Scholarship shall be tenable by the same Candidate.

Scholarships.

Under the same circumstances, the First and Second Candidates in Physiology and Medicine shall each receive a Microscope of the value of One Hundred Rupees. In the event of the successful Candidate having obtained a Prize Microscope at the First Honor Examination, he shall obtain a Prize of Books of the same value.

Prizes.

The first Candidate in Surgery shall receive a Prize of Surgical Instruments of the value of One Hundred Rupees.

Under the same circumstances, the Candidate who shall distinguish himself the most in Midwifery shall receive a case of Midwifery Instruments, and the Candidate who shall stand first in Medical Jurisprudence shall receive a Toxicological Cabinet of the value of One Hundred Rupees.

DOCTOR OF MEDICINE.

The Examination for the Degree of Doctor of Medicine shall take place once a year and commence on the first Monday in December.

No Candidate shall be admitted to this Examination, unless he have produced Certificates to the following effect:

Certificates required from Candidates for Doctor's Degree.

1. Of having attained the Degree of Bachelor of Arts in this or any other University and of having been engaged two years in the study or practice of his profession subsequent to his having taken the Degree of Licentiate in Medicine and Surgery in this University, or a Degree in Medicine or in Surgery at a University, the Degrees granted by which are recognised by the Senate of this University.

Certificates of Moral character, signed by two persons of respectability.

The Examinations shall be conducted by means of printed papers and *vivâ voce* interrogation.

Candidates shall be examined in the following subject :—

MEDICINE, *including* PRACTICE OF PHYSIC, SURGERY, AND MIDWIFERY.

The Examination shall be conducted in such order as will be communicated annually by the Registrar of the University.

Passed Candidates to be arranged in 2 Classes.

On Monday morning in the following week, the Examiners shall arrange in two divisions, each in alphabetical order, such of the Candidates as have passed, and a Certificate under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate.

REGULATIONS RELATING TO STUDENTS WHO COMPLETED THEIR MEDICAL STUDIES IN OR BEFORE MARCH 1856.

Special Rules for present and past students.

CANDIDATES who completed their Medical Studies in or before March 1856 shall be allowed to present themselves for the Degree of Licentiate in Medicine and Surgery and of Doctor of Medicine, on producing the Certificates and other documents specified in the foregoing Regulations.

The first Pass or Junior Diploma Certificate of all Students of the Calcutta Medical College, who have obtained that Certificate prior to the promulgation of these Regulations, shall be accepted as equivalent to the First Examination Certificate of this University.

Graduates of the Medical College, who may wish to obtain the Degree of Doctor of Medicine, shall produce the Diploma of Graduate of Medicine of the Medical College of Calcutta, and afford proof of having been engaged for Five Years in the practice of their profession.

The Examinations shall be the same as those specified in the Regulations hereinbefore contained

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JOHN GRAY, "CALCUTTA GAZETTE" OFFICE.